Art Through The Ages

With the aid of almost 400 illustrations, Erwin O. Christensen traces the evolution of Western painting, sculpture, architecture, decorative arts and crafts from the cave painters to the abstractionists.

This lively and comprehensive history of art discusses the distinctive style and creative inspiration of each major artist and places each major work in its own historical setting.

All the great periods in art are covered—Egyptian, Greek, Etruscan, Gothic and Renaissance—down to nineteenth-century Impressionism and the most modern experiments of today. In each period, Mr. Christensen shows how the restless striving for change produced new problems and new solutions that gave Western art its drive, and makes its discovery and contemplation an exciting adventure.

Erwin O. Christensen is Curator of Decorative Arts and The Index of American Design at The National Gallery of Art in Washington, D.C. He is the author of *Early American Wood Carving*, *The Index of American Design*, *Primitive Art*, and *Popular Art in the United States*.

INDIA BOOK HOUSE

Erwin O. Christensen **THE**

HISTORY OF

WESTERN

ART

Color Plate: (Front Cover) Titian: *Venus with a Mirror*. Courtesy National Gallery of Art, Mellon Collection, 1937.

Color Plate: (Back Cover) Matisse: *Odalisque with Raised Arms*. Courtesy National Gallery of Art, Chester Dale Collection.

SEVENTH PRINTING

v

Writing a history of Western art is possible only because the research of many scholars has laid a foundation. The specialized literature. old and new, is considerable, and is being added to constantly. Newly discovered facts correct old errors, expand our horizon and give us new insight. The kind of research that rounds out and fills in the lesser areas has no effect on the total development, which is the topic of this book. But even in this broad account of major periods and leading artists. more recent sources of information have been favored. The names of specialists identified with particular points of view have been indicated in the text; essential publications are listed in the bibliography. The author has tried to see the art of the past in the light of its own objectives and to present it in an unbiased manner. For the most part, this has not been difficult, as much of what is here said reflects an informed consensus. Lack of space made it necessary to select a few among many masterpieces and to pass over minor periods and minor artists To have emphasized faults within the limitations of a highly condensed text would have indicated a lack of sympathy. Instead it has been a pleasure to record achievements, and it is our hope that the reader will gain both in understanding and enjoyment of Western art.

INTRODUCTION

History of art includes the description and interpretation of the development of painting, sculpture, and architecture and allied branches of decorative and graphic art. Western art includes the art of Europe, the post-Columbian art of the Western Hemisphere and Australia. The arts of ancient Egypt, Crete, Mesopotamia and Persia—the modern Iraq and Iran—are also presented. This is but a part of world art; Asia, Africa, and the Pacific islands, which developed styles of their own, are usually dealt with separately. Though to an extent the influence of Western art has been world-wide in our own day, we can take no account of this expansion here.

Art is rightly claimed as man's prerogative, not shared by his nearest relatives among the primates, but made possible by his intellectual endowment. However, there can be no sharp division between human and animal art. The conical structures of African termites surpass in height and interior elaboration the round man-made huts of the same regions. The artfully constructed nests of the Indian weaver birds resemble finely woven baskets; they are compact and waterproof. These animal structures are utilitarian, and, though they too must have originated in simpler forms, one cannot speak of them as showing any stylistic development as this term is used in art history.

In the rhythmic design of a spider's web, utility and beauty are inseparable, though a more ordinary web will also catch flies. But what shall we say to nature's artistic creations in leaves and flowers, or in the inorganic world in mineral and snow crystals? Here nature has shown man the way to develop a geometric ornament of his own after her models. The art of man is a part of nature's total creation, different from nature's art, but not more perfect. Whereas insects, birds, and animals, like the beaver with his lodge, are said to create by instinct, the artist works on a conscious level, his creativity impelled by forces that are derived from his

unconscious and are aimed at nonutilitarian, aesthetic purposes

The art of nature seems timeless. The development we stress in man-made art may well be a reflection of man's consciousness of his mortality, which is foreign to animals. The ever-changing variety shown by human art in contrast to animal art need not be considered basically human; it is rather due to culture and is of a comparatively recent date. Immortality was virtually assured to the ancient Egyptians during their long history of three millennia, and style changes are often absent or of minor importance in their art. This restless striving for change, so characteristic of Western art, appears first in Greek sculpture, the greatest expression of man's pride in himself the world has ever witnessed.

Animals build mostly for their families or for their species; man, more self-centered, creates for his own convenience and also for purposes of self-glorification. He directs his art to other men or to supernatural powers of his own creation. Utility is important in all periods, but aesthetic aims play an ever greater part as art develops.

In this discussion of art history we give special emphasis to three basic factors: first, the background—the religious, social, and economic conditions that make art possible in any period; second, the foreground—the work of art itself, its style and its variation from other styles; third, the contribution of the individual artist, revealing his inspirations and the extent of his gift. If we were to pay undue attention to environmental reflections, art history in its own right ould be slighted. Any work of art may reflect its period ardless of artistic merit, but what is peculiarly artistic in ' period must be our chief concern.

There are two fallacies we must guard against. First, art history is not a development from primitive beginnings in the past to final perfection in our own period. Styles change but artistic quality is more constant; superior works of art occur in many periods. Second, often one style of art is the characteristic expression of any one period. It is useless to attempt any evaluation between styles that have little in common. We should compare a work of art only with other work of the same period, as we must recognize that each period posed its own problems and arrived at its own unique solutions. The fact that succeeding generations have sought new problems and new solutions gives Western art its drive and makes its study an exciting adventure.
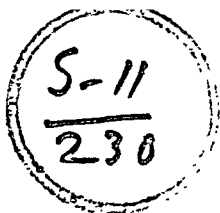
Prehistoric Art in Europe

Origins. Drawing may have originated accidentally when a prehistoric hunter scribbled playfully on the walls of some cave or rock shelter. Natural markings on the rock surface might have suggested an animal to which he added lines of his own to increase the resemblance. Contours of oxen (Ill. 2) have been found finger-drawn on the clay surface as well as interlaced lines made by hand or tool. This does suggest that we are here close to man's first attempts at drawing. It is this
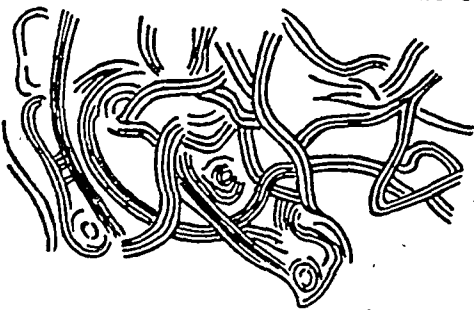
Ill. 2   Contours of oxen. *After Breuil*

period after man began to draw and before he began to write that constitutes the period of prehistoric art.

Hand Silhouettes. (Ill. 3) Hand silhouettes in groups or rows appear on cave walls. One cave (Gargas) shows 150 well-preserved hand silhouettes. They are mostly of the left hand; the right hand apparently was used to blow or spatter the red and black liquid coloring matter. They may represent the earliest cave paintings, if we can speak of them as paintings, and belong to the so-called Aurignacian period.

Periods. Pigments were used for bodily ornamentation during the Mousterian period, but the earliest as well as *more*

cave in France, was discovered, also by chance, as recently as 1940. Other important sites of the Dordogne region include Laussel, Cap Blanc, La Grèze, Les Combarelles, La Madeleine, Font-de-Gaume, Le Moustier, and Cro-Magnon. We get the name Mousterian period from Le Moustier, and from Cro-Magnon, Cro-Magnon man. Farther south in the French Pyrenees are Les Trois Frères, Gargas, Maz d'Azil, Niaux and Aurignac; the term Aurignacian period is derived

from the name of the latter cave. European caves and rock shelters, some seventy in all, vary in size and in the number of engravings and paintings they contain. Font-de-Gaume has over 200 pictures of all periods; Les Trois Frères, over 500. Natural earth colors were used, red ocher or hematite red, yellow ocher, and lampblack made from animal fat burned in lamps. A hollow bone used as a tube for red ocher was

Ill. 4 Bison in profile, La Grèze (Dordogne), France

found in a cave of the Aurignacian period. No blue nor green seems to have been used; landscape was not represented.

Aurignacian Art. The earliest engravings from the Aurignacian period represent animals in simple outline. At La Grèze (Ill. 4) a standing bison is engraved on the rock surface as a flat silhouette showing only one front and one hind leg. This early style is hard and rigid, the contour is continuous, and there is no interior modeling; but the animal is correctly drawn in profile and the resemblance is unmistakable. Details are observed, but the horns are in front view rather than in a visually correct side view. This representation of front view horns is characteristic of the early Aurignacian style. In the later Aurignacian period, as at Lascaux (Ill. 5), this detail appears more nearly in correct perspective. There are thousands of animal paintings and engravings in the Franco-Cantabrian caves, but only a small number have been studied. There are only a few examples of human figures; these are believed to represent sorcerers, as they are masked and disguised by animal pelts.

Lascaux. In this important cave bulls and galloping wild horses, some up to eighteen feet long, appear in friezes on the pure-white rock surface. The paintings are in excellent condition. Contours are fluent and the surface is broadly painted in flat tints. There is no interior modeling yet, but

Ill. 6 The Altamira Ceiling (*After Breuil*), discovered in the late nineteenth century, extends over 40 feet in length, and is closely packed with some twenty-five animals, chiefly bison. The pigments are applied thickly in liquid form and in dry patches of natural earth colors. The painting could have been done more or less in one operation, modeling and color at the same time. The figures are slightly less than life-size. A suggestion of spontaneity which seemed so astonishing at first is perhaps due as much to the technique as to the action of the animals; most of them are really standing still. One bison with raised head is bellowing; the heads of others are lowered or the tails raised. There is a sensitive delineation of horns, nostrils, joints of legs, and tufts of hair. The small heads almost disappear under the weight of flesh (Ill. 7). Red is used for body color and black, for interior modeling and outlines.

6). The discovery of this cave revealed to the world the existence of prehistoric painting When other painted caves were discovered soon after, the study of Paleolithic art began in earnest, pioneered by Abbé Henri Breuil. Other scholars followed, in our own day Leo Frobenius, Hugo Obermaier and Herbert Kuhn, and the search was extended to Africa At first the prehistoric dating of these paintings was questioned, but it became clear that they could not be recent, as in some cases they were covered with encrusted, transparent mineral layers

At Altamira the profile style of La Grèze and the broadly painted style of Lascaux are replaced with full modeling (Ill. 7). The realism is extraordinary considering the simple tools
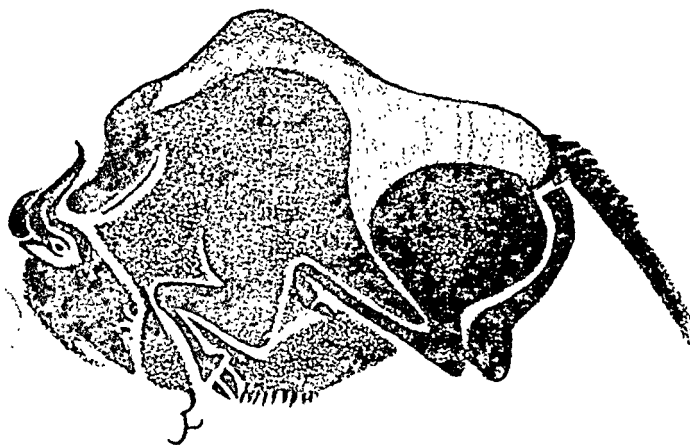
Ill. 7   Resting bison, Altamira. *After Breuil*

available to the painter. Bony structure is differentiated from soft fur and flesh, and massive bulk and correct anatomy are convincingly portrayed The animals are turned in various directions and seem to conform to no apparent composition. The Altamira ceiling is rough and uneven, and the animals are adjusted to this natural relief. Projections are drawn into the painted animals not only at Altamira, but in other caves as well. The artists do not seem to have sought smooth surfaces.

Magic. Several explanations have been advanced as to why prehistoric man painted the animals he hunted and on which he depended for food The theory that "the impulse behind art was bound to the development of magic," first advanced by Solomon Reinach, has been accepted with reservations by

other scholars. This theory is supported by the fact that by 1930, thirty-four pictures of masked dancers had been demonstrated by Obermaier and Kühn. At Les Trois Frères such a masked sorcerer in stag's pelt and horse's tail in the midst of animals may be casting a spell or participating in a ritual for the multiplication of animals or the propitiation of dead animals. In various caves javelins, spearheads, and boomerangs are painted on the animals; on a bear at Les Trois Frères, lines are drawn from mouth and nostrils, presumably to suggest blood, and holes to indicate wounds appear on a carved bear at Montespan. It has been suggested that this points to ceremonial exercise before the hunt. At the Niaux cave a bison is painted seated on his hind legs before objects that are believed to represent votive offerings (Max Raphael). On the basis of this evidence, we may differentiate three kinds of magic: (1) fertility magic—to create new animals, sorcerers cast spells; (2) death magic—to assist the hunter's aim, weapons are painted on the animals and holes appear on carved animals; (3) propitiation magic—to appease dead animals, a bison appears propped up before votive offerings. Sympathetic magic is the belief that in nature there is an attraction between things that resemble each other; thus painted animals attract live animals. Presumably, the greater the resemblance, the more powerful the magic. Thus paintings that not only look like animals but also suggest their bulk, as those painted on the boulders of the Altamira ceiling, may have been conceived as being most effective.

Sanctuaries and Studios. For this reason certain caves appear to have had a magic or religious significance, and these were painted over many times, whereas most caves were not painted at all. Painted caves were known before the nineteenth century rediscovered them, and were believed to harbor demonic powers; at some early date Christian monks painted crosses over the paintings of a cave in the Lake Onega region between the Baltic and the White Sea (U.S.S.R.). Before the caves were opened to tourists and illuminated, they had an eerie atmosphere. Probably intentionally, the paintings were in places that are difficult to get to, as more accessible caves show no paintings. Caves may have acquired a magical significance as symbols of the womb.

There is also some evidence that caves were used as studios. Small slabs incised with animals were discovered at Limuel, some of them more skillfully engraved than others, as if done by master and pupil. Though grease lamps were used for illumination, the artists may also have been aided by eidetic, meaning identical, imagery. Even today persons so endowed can reactivate retinal impressions after as much as a

galloping stags, or a charging mammoth. A dart-thrower carved in the shape of two reindeer (Saint-Germain Museum) and a small horse carved from ivory (Lourdes) are among the smaller pieces that show a close observation of the living animal and compare favorably with the cave paintings. Engraved, perforated pieces may have been used for personal ornaments as necklaces and bracelets. On a Paleolithic bracelet from Grimaldo (Italy), fish vertebrae, nassa shells, and deer teeth were found arranged in a regular pattern, indicating that order was appreciated. Paleolithic man must have been sensitive to aesthetic values and used principles of art as well as magic. We do not know at what stage in the development magic entered into art, or whether even the most primitive kind of art had a magical significance.

Ill. 9 Venus of Willendorf. *After photograph, Naturhistorisches Museum, Vienna*

The East Spanish Style. In 1903 another style of prehistoric painting was discovered in open rock shelters in the mountains of eastern Spain. These paintings represent groups of men and animals 2½ to 6 inches high in silhouette with no interior details. They are usually reddish-brown, black, or occasionally white. Several types of figures can be distinguished, some thin-lined, others with wedge-shaped torsos and heavy thighs. The East Spanish style is of the Neolithic period; it developed into an abstract, schematic style during the Bronze Age. The Cueva Saltadora in the Valtorta Gorge (Castellón) yielded figures about 9 inches high. This site is as important for the East Spanish style as Altamira is for the Franco-Cantabrian. A painting of three walking figures (Ill. 1), discovered and published by Herbert Kühn, is a masterpiece in its sensitive, rhythmic movement. The painting is fresh and spontaneous, done by an artist who was working in a well-established style. A deer hunt (Ill. 10) of the same Valtorta Gorge shows group composition, lively movement, and close observation of postures and anatomical details. The figures are schematic, but the suggestion of action is emphatic. A bowman (Ill. 11) from the same site shows forward movement in an abstract styl?   ? tot?   ?t is expressive and the painting is attrac?

Neolithic Art. Megalithic Structures. The most monumental Neolithic works are the stone obelisks, or menhirs (long stones); stone circles, or cromlechs; and piled-up boulders, or dolmens (stone tables). They are in northern and western Europe, particularly in Brittany. Stonehenge, near Salisbury, England, dated around 2000 B.C., is the outstanding example of megalithic architecture. Unconfirmed legends attribute it variously to the Phoenicians, Druids, Romans, and Sumerians. The Druids could not have been connected with the builders of Stonehenge, as this Celtic priesthood did not appear in history until the first century B.C., perhaps 1800 years after Stonehenge. Excavations at Phoenician sites in Sicily fail to show any links between Stonehenge and the Phoenicians. Like other stone circles, Stonehenge was probably a religious center connected with the worship of the sun and the heavens. Certain stones outside the circle have been linked to the sun, which rises over the so-called Hele (sun) stone on Midsummer Day.

An outer circle, an inner circle, and an inner horseshoe consist of upright stones (Ill. 12): 16 of the original 30 stones
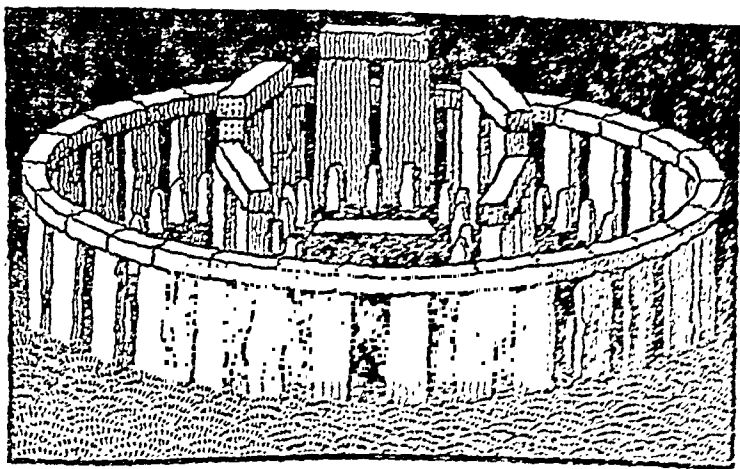
Ill. 12 Stonehenge. restoration. *After the Stonehenge Guide Book. By Permission of the Controller of Her Britannic Majesty's Stationery Office*

of the outer circle are still standing and 6 of the horseshoe. In the outer circle, the uprights were connected by the lintels secured to uprights by mortises and tenons and to one another with toggle joints. S͟ the (bluestones) were transported to St

liths is characteristic of a period that covered many widely separated countries.

Menhirs from Italy (Gulf of Genoa) 3 to 6 feet high roughly suggest the human figure (Ill. 13). They are carved in low relief, with attributes like weapons and eyes and nose. A menhir from Saint-Sernin, France, one of thirty found interred, is elaborately carved, front and back (Ill. 14). Arms are indicated and legs depend like folds or parts of the mantle. Other details are recognizable, a fork (or slingshot), breasts, strands of a necklace, and horizontal lines of tattooing or painting. The carving is executed in a loose sketchy manner, realistic in intent, but with little skill. As isolated finds, they fit no tradition, but suggest that at one stage Neolithic man started on a basis of primitive realism.

Dwellings. Neolithic dwellings, partly subterranean pits with roofs resting on short posts, were neither permanent nor distinguished artistically. The earliest circular types developed into rectangular plans; square and oval types are intermediate stages (Oskar Montelius). Switzerland and the Danube region particularly are associated with lake dwellings on piles, connected to the land by a narrow gangway. Here such dwellings, as safe as hill fortresses, continued in use until after the Bronze Age.

Pottery. Many of the basic shapes known today were developed during this period. Neolithic pottery, made before the pottery wheel was known, shows a profusion of excellent shapes, decorated with geometric ornament of borders, chevrons, zigzags, and spirals (Ill. 15). Some decorations were

GROSSGARTACH　　　AULEBEN　　　HALLE
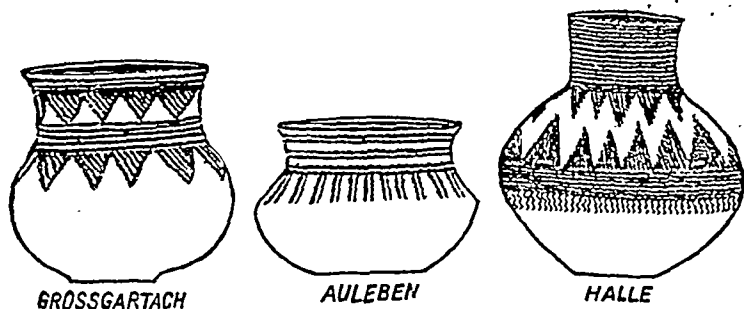
Ill. 15 Neolithic pottery. *After Hoernes* (1925)

made on the soft clay by finger, others by strings which may have held the pot together before firing. The string technique developed borders interspersed with linear ⌒ ifs; in another type lines broaden into ribbon motifs. ᐸogists differ as to how types of pottery may be relate

found in tombs, in cinerary urns, and in caches. They are preserved in many museums. Those of Scandinavian origin have been attributed to six successive periods, from 1800 B.C. to 550 B.C. (Oskar Montelius), though other scholars have suggested different dates (Sophus Müller). Purely ornamental forms of a higher order appeared during the Bronze Age, and sword hilts reflect an artistic development. Early hilts still had wood covers; spiral-topped hilts, probably originating in Mediterranean countries, are characteristic of the Bronze Age. Though highly developed in Scandinavia, circles, waves, and spirals may have been derived from Mycenaean art. Bronze was hammered and was also cast in solid and in hollow forms; sand or clay cores were used for the latter. Knives had cast heads in the shape of horses and human figures; the blades were ornamented with ships and dragons. A remarkable example in the Copenhagen Museum is an engraved bronze sundial mounted on two wheels and drawn by a horse on four wheels (Ill. 16). The disk, six inches in diam-
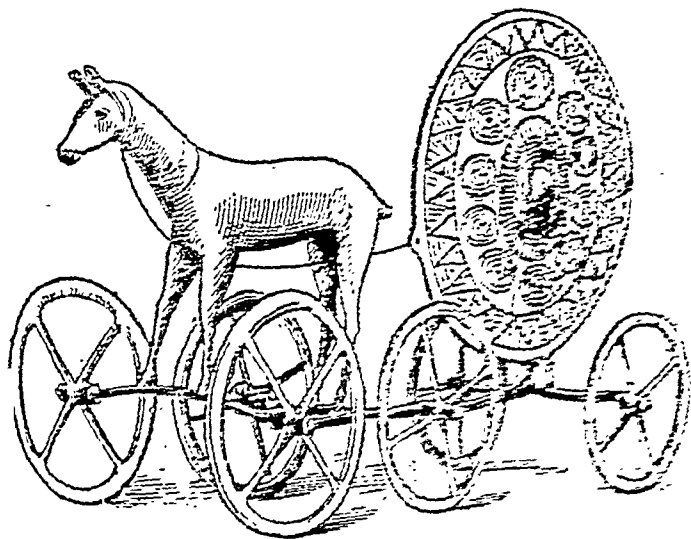
Ill. 16 Sun disk on specimen carriage. Courtesy British Museum. Bronze Age Catalogue (1920).

eter, is covered with gold foil and is dated before 1000 B.C. (Sophus Müller). It is believed to have been deposited in the moss in Trundholm (Denmark) as a votive offering. Before it was deposited, disk and carriage were intentionally damaged, a custom followed in other primitive cultures.

The Bronze Age developed pottery that s

Egyptian Art

Civilization. Egyptian civilization is as old as Mesopotamian and its monuments are more spectacular and better known. Both countries developed impressive art styles, one along the Nile and the other along the twin rivers, the Tigris and the Euphrates. Western art is essentially European art and, after the dawn of history, its early achievements were in Greece. Though this development was largely independent of Egypt, the two Mediterranean countries were in touch with each other. Even in antiquity, Manetho, an Egyptian priest of the Ptolemaic period, used the Greek language to transmit Egyptian history through his list of kings. More recently, the discovery in 1799 of the famous *Rosetta Stone* made it possible to interpret Egyptian hieroglyphics. This tablet bore an inscription in hieroglyphics, a translation into Coptic, the latest form of the ancient Egyptian language, and another translation into Greek. Ancient Egyptian was found to be Coptic written in hieroglyphics, that is to say, only the consonants were inscribed and all vowels omitted.

The existence in the Nile Valley of monumental ruins unparalleled in quantity and preservation attracted the archaeologists of the nineteenth century. Much lay buried beneath the sand, but what was above ground was accessible. Neglected tombs and temples had been ransacked for treasure and used as quarries for building material. With the beginning of scientific explorations, Egyptian art came into its own as an important part of the heritage of mankind. If we keep in mind that Europe for many centuries was very much a part of the Mediterranean world to which Egypt belonged, it seems clear that ancient Egypt can hardly be left out of a history of Western art. Where Egyptian art was most distinguished—in sculpture, painting, and the crafts—it has not been surpassed.

27
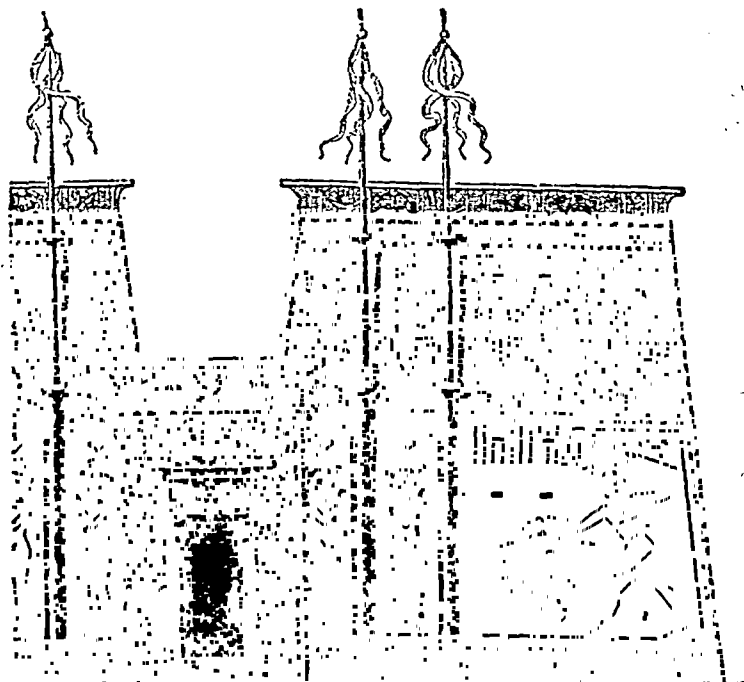
Ill. 17 Pylon, Temple of Edfu, showing cavetto cornice. *After Lübke*

for producing a uniform race, language, and culture. The earliest stage of this Nile culture is represented in the Delta at the village of Merimde by primitive stone implements and rough pottery vessels. These gave way in the early predynastic period to finely chipped flint implements and well-shaped pottery, polished and incised with zigzag lines filled in with white and burned on the inside to a shiny black. The middle predynastic period produced a finer buff-colored pottery with designs of sacred boats. It also produced small figures in the round, made of mud, terra cotta, and ivory. These show raised arms, broad hips, birdlike heads, and undifferentiated torsos; the technique is primitive. Flat paint palettes carved of hard slate are in the shapes of turtles, elephants, hippopotamuses, or fish in simple outline (Boston Museum of Fine Arts). Before the end of the predynastic period, flint implements declined and the invention of the stone borer produced fine stone vessels. Eventually, copper saws were used with sand and emery as the cutting materials.

480 feet high (now 450 feet) and one side of its base, now
measuring somewhat less than its original 750 feet, is over
twice as long as the greatest width of the United States Capi-
tol. Sir W. M. Flinders Petrie estimated that the Great Pyra-
mid required 2,300,000 separate blocks of stone, each weigh-
ing about two and a half tons. The Greek historian Herodotus,
who visited Egypt about 450 B.C., states that it took ten years
to construct a road over which to transport the stones from
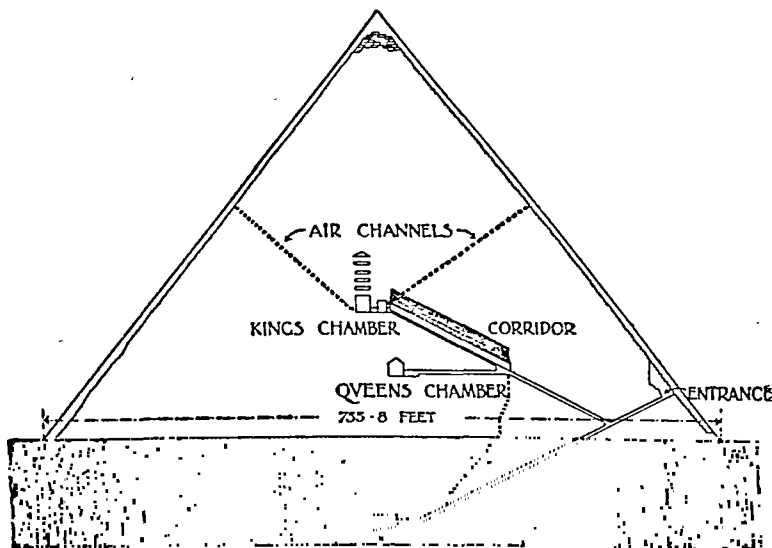
Ill. 23 Pyramid of Khufu. *After Simpson,* A History of Archi
tectural Development (*1929*)

the banks of the Nile to the building site, and that it took
twenty years to build the pyramid, using 100,000 men for
three months of the year. Khufu, who ruled for twenty-three
years, started his pyramid when he ascended the throne. Pyr-
amids were usually begun on a small scale, allowing for suc-
cessive enlargements, so that the pyramid would be com-
pleted during the king's lifetime. In spite of all precautions
taken to protect the king's tomb, the pyramids were entered
and robbed during antiquity as well as in later periods. The
pyramids, placed to face north, east, south, and west, had
chapels attached for offerings and ceremonies. They were con-
nected by a covered causeway with the "valley temples." In
the Second Pyramid the "valley temple" has polished red
granite monolithic supports and lintels, well proportioned
but without decoration. It provided a dignified place for

ground, the largest in the world. It was hewn out of the natural rock and, with the addition of stone blocks, was molded into a recumbent human-headed lion. The head cloth with the serpent indicated a king, the carving of the face was to resemble Khafre, whose valley temple is close by. Though mutilated, the Sphinx is still an impressive monument. It has been excavated repeatedly in the course of history, but the shifting sands of the desert have as often obliterated the work. A paved open temple was discovered between the paws.

Temples. The temple, constructed on the post-and-lintel system, was conceived as a lasting monument for a god, not a place for a congregation. Only the priests and kings were permitted to enter the sanctuary, a small dark chamber at the far end of the entrance. The small Ptolemaic *temple of Edfu* (Ill. 24) on the Nile above Thebes is basically like the Great Temple of Amon at Karnak. Both their plans contain the same four elements: a pylon, or entrance gate, flanked by massive sloping towers with flagpoles (Ill. 17); an open, or peristyle, court; a hypostyle hall (Ill. 26) with, at Karnak, a central double row of columns higher than the others (Fig. 1), and the sanctuary itself (Ill. 24). The sanctuary contained a small shrine, which was used as a receptacle for the small statue of the god on the sacred bark. The *Great Temple of Amon at Karnak* (Ill. 25), the largest of all, acquired size through additions of pylons, courts, and halls in front of existing ones. This temple was begun during the Middle Kingdom, but its latest pylon is from the Ptolomaic period, perhaps 1700 years after the founding of the temple. This pylon, the largest ever constructed (but never completed), had walls 49 feet thick. In front of it stretched an avenue of ram-headed sphinxes, as rams were sacred to Amon. The most spectacular part of the temple is the gigantic hypostyle hall (Ill. 26) with 12 central nave columns, 69 feet high and 12 feet thick. Columns of the lower order are 9 feet in diameter (Fig. 1). The central columns rise above the sides to form the clerestory with openings in the walls to illuminate the nave. Massed together, the 134 columns take up so much space that the interior effect is one of a forest of stone. The columns, carved with hieroglyphics and originally brilliantly decorated, must have been extraordinarily impressive. The paintings relate to gods and the kings.

From the temple entrance, one passed through colonnaded courts, open and sunlit, into the dimmer hypostyle hall, through more halls, each decreasing in illumination and height, to reach the sanctuary, which was almost total. The effect was calculated to create a feeling of awe.

in outline and proportions, the heads are carved with special attention to detail; the total effect is monumental. Rows of monkeys at the top of the pylon refer to the eastern lands, where monkeys were thought to live, ready to greet the rising sun.

The kings of the Middle and New Kingdoms gave up the pyramids as unsafe for burial. Beginning with the XVIII Dynasty, royal tombs were concealed in the less accessible Valley of the Kings opposite Thebes and separated from the mortuary temple. In times of strife, these rock-cut tombs were also robbed of their gold and treasure, forcing the priests to hustle the royal mummies from one hideout to another. Ramesses III had to be reburied three times.

Egyptian architecture developed few ornamental details; capitals (Ill. 27) are the most significant single features.
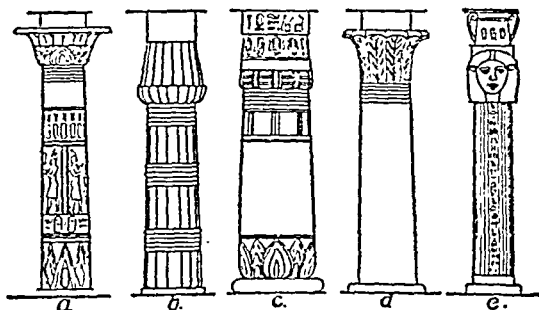
Ill. 27 Types of columns: (a) campaniform; (b) clustered lotus column; (c) simple lotus column; (d) palm column; (e) Hathor-headed column. *After Hamlin (1909)*

Typical are the lotus capitals, representing bud or flower, the palm-leaf capital, and also the Hathor-headed, or Isis, capital. Painted decoration used color to excellent effect in designs based on the lotus and papyrus, the solar disk, the vulture with outspread wings, and the sacred beetle, the scarab. Hieroglyphics were incised in the stone, but other decorations were applied in color and relief after the walls had been covered with a thin layer of plaster (Fig. 1). Austerity, combined with grace and elegance, gives Egyptian ornament a unique place in Western art.

Sculpture in the Round. The cult of kings who became gods after death probably led to the development of sculpture, which did not exist as an art for its own sake. Monumental sculpture in large stone statues represents gods, kings, and nobles. In colossal form, on occasion, god or king statues

fused with the architecture, as in the *Osiris piers* at *Luxor* and the seated memorial statues of *Ramesses* at *Abu-Simbel* in expressions of unity, endurance, and strength. Statues often look as if they had been carved in a front and side elevation like a building. Compact volume is emphasized and feeling of the original stone block is retained. In monumental sculpture in the round, there is no movement to speak of and there are no groups; emotional expression is restrained.

Old Kingdom. Portrait statues during the Old Kingdom were idealized to an extent, so that the individual is represented at his best; deformities and old age were seldom represented. The seated statue of *King Chephren* (Khafre) (diorite, 67 inches high, Cairo) from the valley temple of the *Second Pyramid* is a distinguished example of one of the few remaining statues of the pyramid period. The royal falcon of Horus appears behind the headcloth. The features express impassive, gentle dignity, befitting a king who upon death becomes a god. This statue represents the type which was followed in subsequent periods. In stone sculpture, the figure is rectangular and cubical, but the head is made to look lifelike (Fig. 4), as in the statues of *Rahotep and Nofrat*. The eyes are given detailed attention; they are engraved in copper to hold the iris of clear quartz, which reflects the light and gives the head a living quality; white limestone is used for the white of the eye. In the carefully modeled head the ears are set at their proper level. Rahotep is painted dark red, his wife is lighter; black is used for his hair and mustache and for her wig. She wears a white clinging gown with shoulder straps, and a cloak from which a well-modeled hand protrudes. With variations, the seated posture of this masterpiece is repeated in all periods. In the standing figure facing forward, one leg is set out in front, and the soles of both feet are on the ground. Several V Dynasty figures of *Ranofer* of painted limestone (Cairo and the Gulbenkian Collection of the National Gallery of Art, Washington, D. C.), about life-size and less than life-size, represent this frontal type so characteristic of Egyptian art. Attached to a stone slab in back, they are in the round, practically freestanding. Arms may be extended, held close to the body, or bent holding emblems. Generally speaking, standing and seated figures in the round conform to what has been called a law of frontality (Julius H. Lange). When first discovered, a wooden figure of *Ka-aper* (V Dynasty, 44 inches high) so impressed the workmen as a type they were familiar with that they exclaimed "Sheik-el-Beled" (Fig. 5) due to the resemblance the figure bore to their own village headman. The head, with beautifully carved features, double chin, and thick neck, is highly individualized.

The squatting type, seated on the ground cross-legged, is illustrated in the famous *Seated Scribe* (Ill. 28) of the Louvre (Paris), the educated man of the V Dynasty. His cheeks, inset eyes, and hands are carefully modeled, but the heavy calves less so. His expression of alert attention is noteworthy. In Egypt, a sculptor was "he who makes live," a statue, a "living image." Priests' learning through inscriptions of magic formulas and sculptors'. art combined to produce images "to satisfy the heart of gods." Old Kingdom sculpture remained conservative but highly competent. Though this tended to limit experimentation, it did not preclude development in later periods. The Egyptians themselves looked upon the Old Kingdom as their period of highest achievement.

Ill. 28. Seated Scribe, Louvre. After Lücke.

Middle Kingdom. The XII Dynasty has left a number of distinguished portrait statues in hardstone, which have an insistent appeal. They are distributed among the great collections in Cairo, Berlin, London, Paris, New York, and Boston and are well illustrated in recent publications (see Bibliography). A black granite human-headed sphinx found at Tanis now in Cairo, is associated with the Hyksos however; it shows a deeply-cut muscular face, believed to represent King Amenemhet III. An obsidian head of him in The National Gallery of Art in Washington (D. C. Gulbenkian Collection), is a masterpiece of sculpture. Fig. 6, a study of feature, highly individual and imbued with a brooding temper. It is a fragment apparently from a figure. Because of this known from numerous statues. Great art, no matter what other goals, has nothing comparable.

New Kingdom. This period has left a larger mass more prominent than any other period. During the XVIII Dynasty a greater animation, greater richness in modeling and execution of detail replace the tragic expression of the Middle Kingdom statues. Youth and age were distinguished in the portraits of private individuals. Scenes were no longer confined to the tomb chambers, but were placed in the open. New types appeared and statues were modeled in the open temple precincts. Sculpture came into its own. It is hard to speak of a single style. A king of the period is Amenhotep IV, who became so closely connected with

ism, dedicated to a worship of the sun, became the state religion. In relief, we see *Ikhnaton*, raising his arm toward the sun disk with rays ending in hands (Ill. 29). An unprece-

Ill. 29 Ikhnaton and his family. *After Lübke*

dented realism temporarily revolutionized art. It is shown in Ikhnaton's long head, projecting chin, and prominent cheekbones. In his mortuary statue (Louvre), the style appears more restrained. His wife, *Queen Nefertiti* (Fig. 7), is best known from the painted limestone bust in the Berlin Museum (28 inches high, excavated 1912–1913 at Tell el-Amarna). Her elongated neck is in keeping with her individual headdress. Delicacy of modeling makes this bust one of the fine works of Egyptian art; it is dated around 1375 B.C. and may be a life study. The art of the XIX Dynasty, which followed Ikhnaton's rule, returned gradually to earlier traditions, but something remained of the relaxation of the Amarna period. It is felt in the grace and delicacy of the granite seated statue of *Ramesses II* at Turin.

Reliefs. A relief of *Ikhnaton fondling his infant daughter* (Berlin) and others (Ashmolean Museum, Oxford), showing the human side of the royal family heretofore depicted on the level of gods, represents a type unknown either before or after Amarna.

For a wealth of reliefs of all periods, the reader must be referred to numerous illustrated works now available. Fine reliefs have survived from the III Dynasty, such as the wood panel of *Hesire* and hunting reliefs from the tomb of Ti at Saqqara, of the V Dynasty. Other reliefs of the XII through the XVIII Dynasty give an impression of the accomplishments of Egyptian art in this field. Animals are correctly observed and sensitively reproduced. The suave elegance of the official court art style of the XVIII Dynasty is illustrated in a small limestone *relief of a Pharaoh* (Fig. 8). Every line of the smiling profile is part of an ornamental pattern, calculated, refined, and delicate. A surface design enriches the crown, surmounted by the uraeus, with its superimposed coil fitted into the linear design.

Painting. Egyptian painting is known from tombs of the Old Kingdom (Medum), the Middle Kingdom (Beni Hassan), and particularly from the New Kingdom rock-cut tombs of the nobles west of Thebes. Of over 400 tombs that have been numbered, about 100 are significant artistically (André Lhote). Among them, the tombs of *Rekhmire* (Ill. 30) and
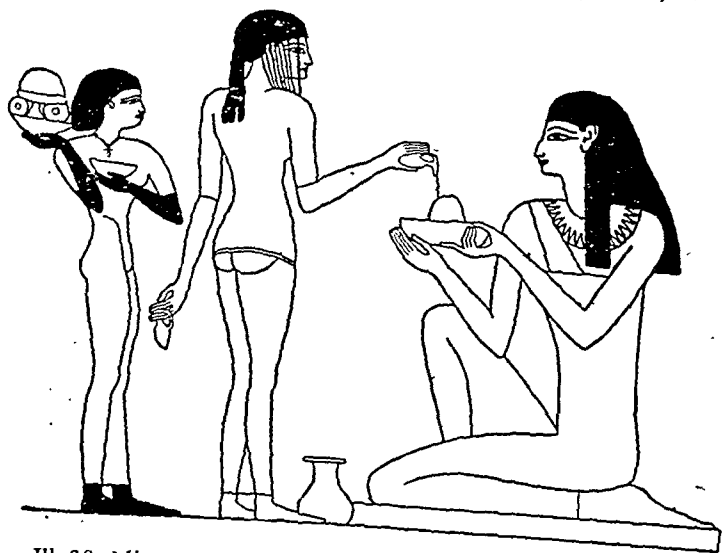
Ill. 30 Mistress and servants, tomb of Rekhmire. *After Schäfer (1922)*

Nakht (Ill. 31) are notable for variety and beauty of color and line. The paintings are in horizontal friezes about 12 to 18 inches high, one above the other. The important figure of the deceased is about 4½ feet high and the background is filled in with hieroglyphic legends executed in the style of the paintings. The figure (Fig. 9) is represented with shoulders in front view and legs and head in profile, though men at work (Ill. 21), dancers, musicians, wrestlers, and acrobats, are often in complete profile; the eye without exception is always in full front view. This suggests that the eye was important to indicate life. Profile views of living persons were not drawn until the VI Dynasty (Heinrich Schäfer), which suggests a disinclination to use profiles even for lesser persons. Only the representation of action favored a relaxation of the rule. As profile fingernails and toenails were not avoided (Schäfer), lack of skill was not the reason for avoiding side-view eyes. On occasion, even an unusual posture is attempted, as in the back view of the central figure of the maid in Rekhmire's tomb (Ill. 30). It is likely that the combination of profile and front view was considered as doing complete justice to the living person, robbing him of nothing essential. We presume that this habit was based on magic and developed as a compromise that assured maximum safety for survival. Representation is flat and avoids perspective and foreshortening, which would make objects look smaller and thus would detract from the desired monumental effect (Ill. 22). Composition and movement were undeveloped in comparison with later periods, but individual figures are often lively and graceful (Ill. 31). Egyptian painting with a limited palette of colors in flat tints achieves spectacular results. Clinging costumes and pleated loincloths contribute to the linear effect, and the lithe figures (Ill. 31) are outlined in a darker color. In the best examples (Fig. 9), line as pattern and brush

Ill. 31 Musician, tomb of Nakht. *After Schäfer (1932)*

stroke reveals a beauty of its own. The Amarna influence is also felt in painting *(Northern Palace, Tell el-Amarna)*; the fragmentary condition of the wall paintings suggests that they were naturalistic and did not confine themselves to registers and single walls, but treated the scene as a unit covering all walls. Such an enlarged space conception, embracing the world as a unified whole, is perhaps a reflection of a new spirit that resulted from the sun worship.

Until recently, the world knew little of Egyptian painting, as the tombs themselves had to be visited to be appreciated. In 1930, a Metropolitan Museum of Art exhibit of remarkably accurate copies (made by Norman de Garis Davies and his wife) of some of the XVIII Dynasty tomb paintings came as a revelation. Since then good color reproductions have also become available *(see* Bibliography). Some restorations have been made of the paintings themselves, which have shown a tendency to disintegrate after the tombs have been opened.

Crafts. A great variety of forms and materials were used in cutting stone in the various periods. During the prehistoric period hard basalt as well as soft alabaster was cut by hand into large thin vases, hollowed out and highly polished. The use of hard stone declined during the dynastic periods, as soft alabaster was preferred. Gold was so common that the picture of a collar of beads became the hieroglyphic for gold. Casting in cire perdu (lost wax process), chiseling, and soldering were well understood. Some magnificent jewelry (gold pectorals from Dahshur, twelfth century, B.C.) are of openwork gold plate, engraved and set with colored stones, carnelian, turquoise, and lapis lazuli. One of Sesostris II (Cairo) shows two hawks between the royal cartouche; a headdress of gold threads is decorated with delicate flowers and berries of lapis lazuli set in gold sockets. Bracelets, daggers, and axes show different techniques, including inlay. Silver, then known as "white gold," came into use later than gold, but hammered copper was used in vases with cast spouts. A life-size copper statue of *King Pepi and His Son* is the best-known early work made of hammered plates riveted together.

The sensational discovery (1922) of the untouched treasures of *Tutankhamen's Tomb* (end of XVIII Dynasty) gave us a complete picture of the arts and crafts of his period. Here for the first time the world was confronted with a unique gold sarcophagus enclosing the mummy and a gold portrait mask of the king, a part of the outer coffin. The reddish glitter of the gold is enhanced by colored inlay of the mask's blue striped headdress. The lavish use of gold, elaborately chased and embellished with superimposed

Sheik-el-Beled, wood,
Museum. *Lehnert and
ock*

Fig. 7 Queen Nefertiti, Berlin Muse-
um. *Staatliche Bildstelle*

ig. 6 Amenemhet III. *National
allery of Art, courtesy C. S.
ulbenkian (loan)*

Fig. 8 Relief of a Pharaoh. *Nationa
Gallery of Art, courtesy C. S. Gulben
kian (loan)*
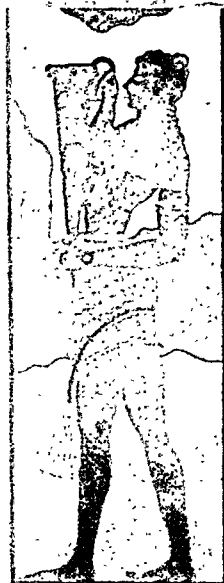
Fig. 17 Cupbearer, reproduction, Cretan fresco from Knossos, 1500–1350 B.C. *Metropolium of Art*

Fig. 12 Stele of Naramsin, Akkadian period, c. 2340–2180 B.C., Louvre. *Archives Photographiques*
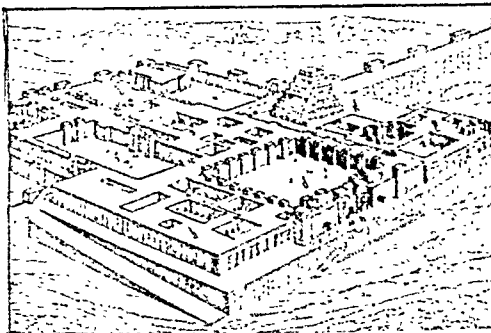
Fig 13 Palace of Khorsabad. *After restoration by Perrot and Chipiez*

Fig. 14 Gudea, Neo-Sumerian period, 2125–2025 B.C. *Copyright British Museum*

Fig. 15 Winged being and the arms-bearer of the king, alabaster relief, Assyrian, c. 850 B.C *Metropolitan Museum of Art, gift of John D. Rockefeller, Jr., 1932*

Ancient Near Eastern Art

While Egypt was developing a civilization on the Nile, o
nations to the east and north were also emerging from S
Age villages to build cities and unite city states into k....,
doms. Those who settled along the great rivers like the Tigris
(northern branch) and the Euphrates (southern branch) or on
islands like Crete gained stability and achieved continuity as
nations. They advanced more rapidly than their neighbors in
Syria (Phoenicians) and in Asia Minor (Hittites). Though
these nations on the periphery also made contributions to
ancient art, they lack the continuity found in Egypt and
Mesopotamia.

Mesopotamia. Mesopotamia, like Egypt, was a leading cul-
tural center of the ancient world before the rise of Greece.
The other nations of this region were influenced by Mesopo-
tamia and passed these influences on to the West. Mesopo-
tamia lacks Egypt's architectural ruins above ground and its
wealth of large stone sculpture. Palaces, temples, and cities
built of sun-dried brick disintegrated and are known from
archaeological restorations begun in the mid-nineteenth cen-
tury. Stone sculpture, with exceptions, is modest in size; some
of the best pieces do not exceed a few feet. Monumental
rock carvings are from the mountainous countries to the
north and west. Painting is represented chiefly by colored
tiles; gold, by jewelry and decorated weapons from Ur; silver,
by a well-known vase which Entemena, King of Lagash, pre-
sented to the temple. Copper is known from statues, as part
of temple furniture. Objects of bronze, as well as reliefs,
heads, and statues have been found chiefly in Syria, Anatolia,
and Luristan (Persia).

Regions and Periods.[4] Sculpture is often identified by the
names of the sites where excavation took place, like Warka,

Ancient Near Eastern Art

While Egypt was developing a civilization on the Nile, other nations to the east and north were also emerging from Stone Age villages to build cities and unite city states into kingdoms. Those who settled along the great rivers like the Tigris (northern branch) and the Euphrates (southern branch) or on islands like Crete gained stability and achieved continuity as nations. They advanced more rapidly than their neighbors in Syria (Phoenicians) and in Asia Minor (Hittites). Though these nations on the periphery also made contributions to ancient art, they lack the continuity found in Egypt and Mesopotamia.

Mesopotamia. Mesopotamia, like Egypt, was a leading cultural center of the ancient world before the rise of Greece. The other nations of this region were influenced by Mesopotamia and passed these influences on to the West. Mesopotamia lacks Egypt's architectural ruins above ground and its wealth of large stone sculpture. Palaces, temples, and cities built of sun-dried brick disintegrated and are known from archaeological restorations begun in the mid-nineteenth century. Stone sculpture, with exceptions, is modest in size; some of the best pieces do not exceed a few feet. Monumental rock carvings are from the mountainous countries to the north and west. Painting is represented chiefly by colored tiles; gold, by jewelry and decorated weapons from Ur; silver, by a well-known vase which Entemena, King of Lagash, presented to the temple. Copper is known from statues, as part of temple furniture. Objects of bronze, as well as reliefs, heads, and statues have been found chiefly in Syria, Anatolia, and Luristan (Persia).

Regions and Periods.[4] Sculpture is often identified by the names of the sites where excavation took place, like Warka,

a goddess, as well as rams and plants. Mesopotamian representation emphasizes combat; lions attacking bulls appear on a ewer from Warka, perhaps symbolizing gods engaged in struggle. Other massive forms carved in high reliefs, without background, represent this early experimental stage of Mesopotamian carving approximately contemporary with the I Dynasty in Egypt. A female head in gypsum (flat, eight inches high; Frankfort, Pl. 7) is so fine in the carving of mouth and chin and the oval of the face that it compares with Greek art of the historic period. Hair and eyes were attached and inserted in other materials, probably metal. A small hard limestone monster (3½ inches high) combines the head of a lion with a human body, a compact muscular symbol of fierce, cruel strength (Fig. 10). The specific meaning is uncertain; a mother goddess has been suggested (Henri Frankfort).

Early Dynastic Period: 3000–2340 B.C. Statues of king, priest, or noble were intended for temples, where the statue, charged with an inscribed message, confronted the god. Gods are larger than worshipers; they are identified by an emblem like a lion-headed eagle and have exaggeratedly large eyes. These characteristics of divinity can be seen in the god *Abu*, "The Lord of Vegetation," one of ten white gypsum statuettes found at Tell Asmar near Bagdad. The cylindrical shape and rounded form (Fig. 11) are characteristic of Mesopotamian sculpture, in contrast to the cubical block in Egypt. Color is introduced through the blue lapis lazuli or black limestone of the pupils set into eyeballs of shell; hair is painted black and details are stylized. During the second and third dynasties, the sharply articulated shapes became soft, a delicate smile appeared, and textures of materials were expressed. A magnificent cow's head cast in gold from Ur was once attached to a wooden harp inlaid with shell, lapis lazuli, and red jasper (University Museum, Philadelphia). Among the inlaid scenes which appear on the soundbox of the instrument (restored) is the Sumerian hero Gilgamesh, strangling a bull under each arm. Gilgamesh corresponds to the Hebrew Samson and the Greek Hercules. This harp is one of several objects found; among them are a gold fluted cup of graceful flare (University Museum) and a gold helmet (British Museum).

Akkadian Period: c. 2340–2180 B.C. Sargon of Akkad became the ruler of various city states as a king. His coming to power introduced a new northern group of Akkadians, Semitic people who were not Sumerians. Speaking another language, the Akkadians adopted Sumerian civilization and script; their best-known work is the *stele of Naramsin*

(Fig. 12). This relief (over 6 feet high) glorifies Naramsin, the grandson of Sargon, in victory; he stands at the top of a mountain before his enemy, who is about to free himself from a lance. Naramsin, resting his foot on the slain victims, is larger than life-size; a horned crown and sun disks above indicate his divinity. Against the disorganized foe, the victors march up in a solid group. The artist has succeeded in suggesting an event in a unified composition and with a sense of freedom.

Neo-Sumerian Period. 2125–2025 b.c. Some of the best-known sculpture in the round belongs to another city state, Lagash (or Tello), during its brief period of power. Gudea, the king, is represented in a number of seated and standing figures which resemble each other a good deal. The Naramsin stele have been known for some time, whereas our knowledge of Sumerian art is based on more recent discoveries. The traditional picture of Mesopotamian art as being stern and concentrated on an expression of power, while likely to be modified as new discoveries add to our scant supply of monuments from the Sumerian period, still holds for the Gudea group and the later Assyrian reliefs. It is also true that the pleasant aspects of contemporary life, as evidenced in Egyptian art, are absent from Mesopotamian art. It has no place for the light touch and, like the Old Testament, knows no humor In Mesopotamian reliefs, kings engage in religious ceremonies and in scenes of battle. In sculpture in the round, the figure stands or sits, in either case motionless. Standing or seated, Gudea presents a powerful physique, calm in feature and posture. He holds his hands clasped and the well-rounded figure is compact and firm. Something of the large open eyes of the earlier statues (Fig. 11) is present here. Head and torso (Fig. 14) emphasize anatomy; the head with its large ears, heavy eyelids, and stylized details is portraitlike. Hands interested the sculptor only so far as they indicated posture. Carved of hard diorite, the Gudea statues are masterful in their perfection of finish. A head is precise in detail and in the carving of the cheeks and the corners of the mouth is subtle.

Statues were proof of the king's devotion to his god, from whom he expected favors. Gudea built temples. From the texts he placed in the foundations of the temples, we learn how the king felt about his god, and the benefits he expected from "the humid winds which bring the rain" for the "fields to bear" and "the dykes and canals to swell," (Frankfort). Gudea ascribed the peace and prosperity of his rule to his good relations with the gods. Unlike Egyptian art, representations of Mesopotamian gods tell us little of reli-
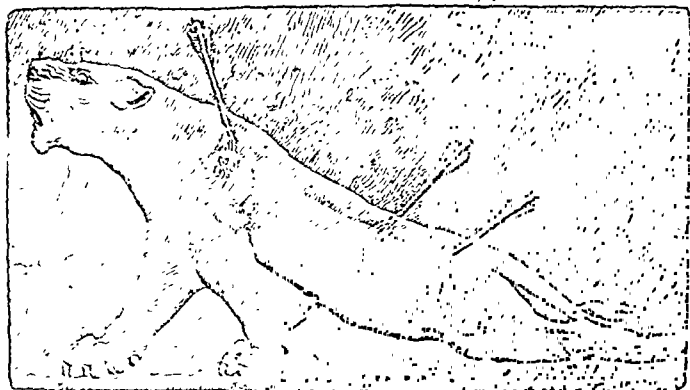
Ill. 32   Dying Lioness. British Museum. *After a drawing by Harold B Warren, courtesy Winnifred B. Warren*

Museum, Ill. 32) render the details with sympathy and understanding; they rank among the masterpieces of this style. This sensitive treatment is not transferred to the figure, not even to a lush banqueting scene showing Ashurbanipal and his queen under a grapevine and among palm trees. For all the descriptive detail of the elaborate furniture, the heavily robed figures preserve a stiff formality.

The most extensive demonstration of Assyrian reliefs (Fig. 15) are those which lined the walls of Ashurnasirpal's palace at Nimrud (about 3 feet and 7 feet high). The king is shown as priest, with his officials holding libation cups or with winged griffin demons. In a splendid mythological relief (Ill. 33), a winged god holds a thunderbolt seemingly threatening a fierce dragon. Though in retreat, the dragon, with clawlike hands and snarling mouth, turns his head back aggressively. The god's expression is unperturbed.

In the hunting and battle reliefs (British Museum), whole campaigns and royal lion hunts are in considerable detail. The hunted animals are rendered with extraordinary vigor in a variety of convincing attitudes. The reliefs are low and flat, and depth is not represented; but action is more spirited than in Egyptian reliefs. The style is not the same during the several periods represented by the ruling kings. The reliefs in Sargon's throne room at Khorsabad represent processions suggesting a tapestry effect. The most ambitious Assyrian reliefs represent Ashurbanipal's war against the Elamites and the destruction of their city. In a mighty battle covering several registers, the action spreads in depth as

one episode is placed above another, the lower edge forming
a baseline in the foreground.

Carved human-headed winged bulls were placed at the
barrel-vaulted entrance gates as guardian spirits: twenty-six
pairs were found at Khorsabad. These monolithic stone mon-
sters were built into the wall to support brick arches (Ill. 34);
towers flanked the gateway. In front view, two legs show, in
side view, four, so that five legs appear when seen diagonally.
Where two bulls come together, the one in front against the
tower, though showing a profile body, also turns his head
(Ill. 35). The carving is excellent; muscles are differentiated
and veins are indicated. The carvers studiously devoted
themselves to bringing out attractive decoration, so that we
can speak here of an idealized combination of man and
beast.

Walls and towers were important in Mesopotamia. Inscrip-
tions on the gates refer to them as "conquerors of kings"
and "foundations of the throne." Bulls and lions were
symbols of force and evil, opposed to man and to be con-
quered by him. Beards, horns, and wings related to kings and
gods. The combination of the human heads, emblem of di-
vinity, and the strength of animals symbolized protecti
power (Ill. 34).

Architecture. The primitive temples of the early peric

Ill. 33 Assyrian relief from Ashurnasirpal's palace, Nimrud. *After
Lübke*

3500–3000 B.C.) are known from excavations. The later palace (Fig 13) with its temple-tower (ziggurat) is but an elaboration of house or temple. The use of sun-dried brick and lack of an abundant supply of timber made for narrow rooms, thick walls, and vaults built over temporary wooden forms. The rooms were grouped around a court. Entrances placed on a central axis were avoided. The extensive use of semicircular barrel vaults introduced a new principle into architecture. Though vaults were known to the Egyptians, they were not used above ground.
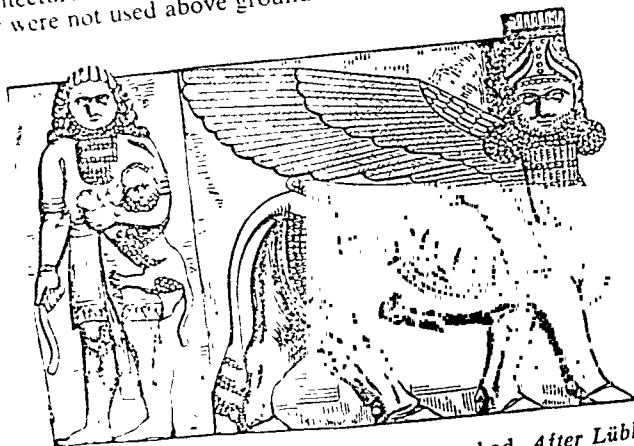
Ill 34 Human headed winged bull, Khorsabad. *After Lübke*

The characteristic part of one type of temple was a hill, man-made and covered with glazed tiles, with steep battered sides, square or rectangular in plan. A ramp or flight of stairs led to a platform on top. The most famous ziggurat at Babylon, the Biblical *Tower of Babel*, was an eight-stage pyramid, with a continuous ramp leading around it from top to bottom, each stage was in one color. Every town and many royal palaces had such towers. They have survived as low hills in the Mesopotamian valley. The other type of temple was essentially a rectangular room with a pedestal for the god's statue.

The large square court of *Sargon's Palace* at Khorsabad (Fig. 13) measured 300 feet on each side; the smaller courts were for service quarters, and several temples were included in the palace. As protection against floods, palaces were erected on huge platforms. Those awaiting an audience with the king passed by the impressive reliefs of the forecourt and through the gates lined with the human-headed bull

The walls of the throne room were covered with brilliant painting in superimposed friezes known from restorations. Reliefs on the stone throne represented Sargon on his chariot above slain enemies, with soldiers piling up pyramids of heads before him (Henri Frankfort).

War was perhaps no worse in Mesopotamian times than in any other period, and kings have often used art for their own glorification. Mesopotamian reliefs differ in this respect; art was used almost exclusively to emphasize the might of the king and the ruthless punishment awaiting the
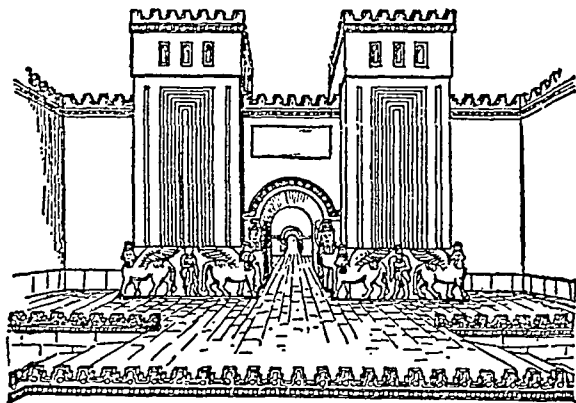
Ill. 35 Gate, Khorsabad. *After Hamlin (1909)*

rebel. The Assyrian Empire, with its capital Nineveh, was destroyed in 612 B.C.

The Late Babylonian Period: c. 612–539 B.C. After the fall of Nineveh, Babylonia, where Mesopotamian culture had originated, returned to power for approximately seventy years. During Nebuchadnezzar's reign a new technique of using colored glazed tile in relief was created. A frieze of walking yellow bulls and white dragons on a blue ground decorated the walls of the *gate of Ishtar*. Babylonian sculpture was less important.

Persian Art. The late Babylonian rule was replaced by the Persian Empire when Cyrus conquered Babylon (539 B.C.). For about two centuries, the Persian Empire remained undivided in the hands of the same royal (Achaemenian) family. Persian architecture and sculpture used stone and are known from the ruins of palaces built in Persepolis by Darius and Xerxes. The architecture is characterized by slender stone columns in large halls and monumental stairways flanked by relief-carved friezes of dignitaries in stately

processions. The Mesopotamian bull motif on top of inverted volutes was used for capitals (Ill. 36). Persia provides one of the first examples of the use of calculated proportions in architecture. Definite proportions between width and height, as 1:2. 2:3. or 3:5. have been found in doors and windows (Marcel A. Dieulafoy). Color and gold were used on lintels and enameled tiles on walls, as in friezes of archers and lions in the Louvre. Persian reliefs are sober and dignified, calm and serene in spirit. quite different from the aggressive ferocity of Mesopotamia.
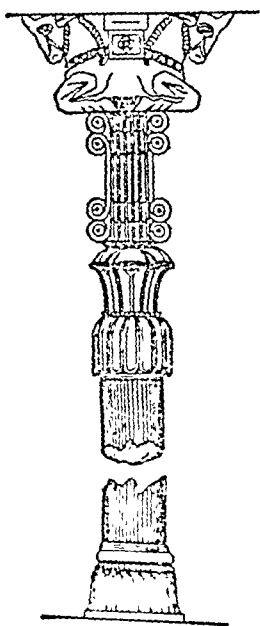
Ill. 36 Column from Perse-
polis. *After Handin (1900)*

Architecture and sculpture were designed for court ceremonials, to reflect the absolute power of the king Persian art was contemporary with Greek art, which was known and appreciated by the Persian kings. but Persian art remained aloof from any Greek influence. Little is known of its early periods, and nothing, of its fate after the downfall of Persia, when conquered by Alexander the Great. As court art. it came to an end and had no influence on Western art.

Small portable objects of bronze have been excavated at Luristan. in the western mountains of Persia. They include objects of personal adornment; many relate to harnesses (Fig. 16) and chariots, and others suggest a religious use as votive figures. The dates given to the Luristan bronzes vary considerably, as this label has been attached to a variety of bronzes, not all of which necessarily relate to the same period. The Godards date them between 2000 and 800 B.C. The animal motifs are adapted to the objects. They may be abbreviated and simplified, and one animal may change to represent part of another animal. This imaginative and free use of animal motifs is said to be characteristic of Luristan bronzes. There are other specimens that suggest affinities to early Mesopotamian motifs, like winged heraldic bulls placed on either side of a sacred tree motif. The artistic significance of Luristan bronzes is considerable. and they are eagerly sought by collectors.

Cretan Art. The newer Cretan archaeology was founded

by Arthur T. Evans, who started excavations at Knossos (1899). An entire civilization, previously unknown to the modern world, came to light. The chronology established by Evans differentiates Early (3000-2000 B.C.), Middle (2000–1500 B.C.). and Late Minoan (1500–1300 B.C.). The unfortified palace of Knossos (near Candia) was the center of Cretan civilization. It was rebuilt three times and finally destroyed about 1400 B.C. Our knowledge of Cretan art and civilization is an exclusive contribution of archaeology; history had given us some hints through the early Greek myths of Theseus, the Minotaur, and the labyrinths of King Minos, inspired by the complex plan of Cretan palace architecture. In contrast to other civilizations, this culture is known to us only through its works of art.

The general picture one gets of ancient Cretan life through its art is charming. We see flowery landscapes in painted frescoes: great palaces. stately processions (Fig. 17), dances and athletic games of skill. but no scenes of warfare. no acts of violence. nothing to disturb the peaceful bliss of a happy existence.

The king's palace. not the temple. is of dominant interest: the king himself seems to have been high priest. and a small part of the palace contained a sanctuary. Crete had many palaces; *Knossos* is the best known and the largest. It was built around 2000 B.C. and lasted for six centuries. This palace is different from the Egyptian temple; it lacks a central axis, a symmetrical system. and a monumental façade. It had pavilions. porches, galleries. and rooms turned away from the sun apparently to provide for different seasons and different times of the day. In such livable interiors. the social forms must have been more natural and human. less artificial and stilted than was customary in Egypt in the fourteenth century B.C. or at Versailles in the seventeenth century A.D.

The stone architecture was interspersed with wood piers. lintels. and columns. Houses varied in height, and the palace was adjusted to the natural setting: gardens were more like the Japanese gardens, modeled after nature rather than nature formalized in the Renaissance and modern manner. Color extended to the interior; frescoes or painted stucco reliefs covered the walls. colored ornaments covered ceilings. the light floors were divided by bands of red stucco and may have been covered with rugs.

The male dress was simple and shows no change in the course of centuries; women wore elab costumes an used fine jewelry. The frescoes and co efs represe slender, thin-waisted figures (Fig. 17) with man

through the work of Evans, so Mycenaean, or pre-Greek art, is based on the excavations of Heinrich Schliemann (1874–1890, Mycenae, Tiryns, Troy). Mycenaean civilization was based on bronze, as Homer says, though he lived in the age of iron. Homer's *Iliad* takes its themes from the deeds of ancestors, and the myths deal with the ancient cities of Mycenae, Tiryns, Thebes, Orchomenos, Pylos, and Athens (Acropolis).

About 1600 B.C., Greek tribes were warring against each other and building great fortresses; neither Cretans nor Greeks built such structures. This new Mycenaean architecture, unlike Cretan work, is megalithic in character: cyclopean blocks were used for walls and gates, as at Tiryns and Mycenae, and vaulted beehive tombs were constructed.

The Mycenaean palace featured the living quarters of the ruler, the Men's Hall or megaron, which was larger and higher than all other rooms of the palace. The megaron originated from the cell, which was also to develop into the cella (or nave) of the Greek temple. Mycenaean art adopted the Cretan use of colored stones, wooden columns, piers and entablatures of wood, and perhaps flat roofs. The interior fresco decorations of the megaron were by Cretan artists, using friezes of figures, bull vaulting, warfare, and hunting scenes. Cretan goldsmiths and gem cutters were employed in Mycenaean metalwork and jewelry.
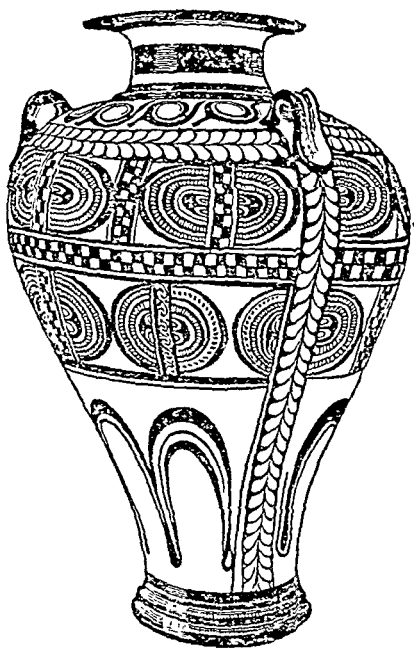
Ill. 37 Palace style vase from Knossos, Crete. *After Evans and Hoernes (1925)*

Mycenaean architecture is here illustrated by the *Lion Gate* of Mycenae (Ill. 38). It was originally (about 1200 B.C.) the entrance gate to a fortified palace. Two posts support a heavy lintel, and the space above the lintel is filled in by a

Greek Art

Significance. Except for a present-day renewal of interest in Egyptian art, no preclassic style has had so prolonged an influence on the art of Europe, particularly from the Renaissance on, as Greek art. The specifically Greek influence was limited to certain periods of Greek revivals; more often it was Greek art as modified by the Romans—a classic influence which began with the rediscovery of Roman art in Italy. In the present day, when classic art has ceased to be a source of inspiration to modern art, the interest has turned to the Greek archaic period. Nevertheless, a few basic shapes and characteristic motifs have endured for over two thousand years.

In the field of aesthetics and art criticism a concept of beauty in art, based on order and revealed in harmony, rhythm, and balance, owes much to the Greeks. The classic influence on Western culture is not restricted to the arts, but appears also in literature and philosophy. Even modern science has a kinship to Greek thought and the beginning of scientific thinking. Johann Winckelmann, through his interest in classical archaeology (1763), laid the foundation for the academic study of art history, basing his studies on Roman copies of Greek originals. It was left to the publications of his successors, H. Brunn (1857–59) and Adolf Furtwängler (1893), to clarify the underlying Greek contribution. The fascination which Greek art had for the nations of the West, though intermittent, is unparalleled; it rivals that of Egyptian art in duration.

General Character. Greek art is unique in that it limited itself to a few motifs that were developed to a final perfection. Basic to Greek thought are its intense preoccupation with man and its striving for rational interpretations. The interest in man found visual expression in sculpture, and a

and short zigzag pleats of the tunic form a charming and effective ornamental pattern. These are a few typical examples of the hundreds of archaic figures and single heads that have been excavated.

The small island of Siphnos enjoyed prosperity during a period before 525 B.C. due to the income derived from its gold and silver mines. The Siphnians erected a *treasury at Delphi* and employed good sculptors on the relief-carved frieze. Form is made to appear more rounded and bulging than it really is (Fig. 22). In the static figures drapery clings to the contours and becomes ornamental; line, shape, and mass are emphasized with a sophisticated calculation. In this monument, one of the most effective of archaic sculpture, the style reaches its culmination. It is this phase of Greek art that has inspired some modern sculptors.

The fragmentary marble figures from the *temple of Aphaia* on the island of Aegina, representing a battle between Greeks and Asiatics, date from the end of the archaic period (*c.* 500–480 B.C.). Discovered before the age of scientific restoration, they were restored by the Danish sculptor Bertel Thorwaldsen, who was so proud of his competence that he said he could no longer distinguish between the original parts and his own (erroneous!) restoration. To fit into the triangular pediment, standing, kneeling, and lying figures were arranged in a symmetrical, balanced manner, although each figure is individually posed. The nude figures suggest the heroic age and reflect the Dorian school of sculpture's interest in anatomy. They are fully rounded and finished, even in back, which could not be seen; but their posture is static and lifeless. Athena, standing in the center, is more archaic than the others, as the artist hesitated to take liberties where religion prescribed adherence to conventions.

The pedimental figures of the *temple of Zeus* (*c.* 465–457 B.C.) show sculptural developments. Some fairly well-preserved figures were found where they had fallen when the temple was destroyed by an earthquake. The more advanced west pediment contains some exceedingly fine work, severe in facial expression, but free in action and flowing in the clinging drapery. In the convincing struggle between centaurs and Lapiths (Greeks), the frozen immobility of the Aegina figures has been overcome.

Transitional Period: 480–450 B.C. During this brief period, Greek sculpture culminated in the freedom of the period of Phidias and the Parthenon and the personalities of the sculptors began to emerge. We do not always know the names of the sculptors, but stylistic differences stand out more

lashes cut into the edge, and the outlines of the lips, which contrast with the smooth surface of cheeks and chin.

The Second Half of the Fifth Century B.C.: *Phidias and Polycleitus.* Very little is known of the Greek sculptors themselves. Phidias reached his climax under the administration of Pericles in connection with the artistic adornment of Athens. His celebrated statue of *Athena Parthenos* was erected in 438 B.C. This figure, about 40 feet high, was constructed, using bronze, silver, colored marble, gold and ivory, over a wooden core. The original statue has long since been destroyed; it is known chiefly from a small Roman copy, the *Varvakeion statuette,* though the copy has but a faint glimmer of the original's majesty. The Athenians regarded their goddess as the symbol of the state, reassuring Athens through her wealth, her weapons and alliances, and inspiring fear in her enemies, although self-assured peacefulness rather than threatening hostility appears to have been the impression intended. Our modern world has nothing comparable to show, either as art or as a symbol.

The seated statue of *Zeus* at Olympia, of about the same size, was made of even more precious materials. Its dark marble, ebony, and precious stones intensified the color effect. No copies have been preserved (except minor representations on coins and gems), but the impression of grandeur made on those who have left us descriptions was overpowering. We are told that all grief and misfortune were forgotten when standing before this statue. "A singular magic of peace, gentleness and kindness emanates from this statue, and faith itself is strengthened." Only a few works in Western art have comparable emotional effects on the observer or achieve such depth of religious feeling.

Phidias's life-size *Lemnian Athena* was in bronze; a Roman copy in marble shows the youthful goddess bareheaded. Originally, she stood on the Acropolis, a spear in one hand and her helmet in the other. Though serene, she is also gentle, as if showing concern for the Athenians over whom she was watching. Compared to the Charioteer of Delphi, the posture is more relaxed, the drapery not quite so severe (Fig. 25).

Leaving the architecture of the Parthenon for a later discussion, we turn to the exterior sculpture of the eastern pediment. Of the architectural sculpture the pediments were made last, after the dedication of the temple. Plutarch tells us that "everything was made under Phidias's direct charge." Even if Phidias did not carve the figures, he must have designed them. The subject of the east pediment, *the birth of Athena,* has often been told, and lack of space prevents our

(Ill. 61), was over 500 feet long, representing in great vari-
ation the many participants, including some magnificent
horses and riders. The frieze of the Parthenon alone marks
Phidias as a great sculptor.

A famous contemporary of Phidias was the sculptor Poly-
cleitus of the Dorian School of Argos. He worked in bronze,
and his style has been recognized in three well-known Roman
copies, *The Spearbearer* (*Doryphoros*, Fig. 28). *The Fillet-*

Ill. 43 Wounded centaur, metope from Parthenon. *After Lübke*

binder (*Diadumenos*), and an *Amazon*. Sculpture has
reached a stage of freedom and ease in the posture of the
figure; archaic stiffness has vanished and anatomy is mastered
in all its details. Polycleitus is known for three things: (1) he
was the sculptor of athletes, (2) his heads are placid and
stolid, and (3) he used a scale of proportions known as a
"canon." The palm of the hand is four times the breadth of
a finger, the length of the foot is four times the breadth of
the palm, the breadth of the shoulders is four times the
breadth of the head, and the height of the figures is seven
times the length of the head. *The Spearbearer* demonstrates
this canon. The off-balance pose, placing his weight on the
advanced right foot with the left knee bent, is a significant
departure from frontality. Order, regularity, and repose are
distinctive characteristics of Polycleitus' work. A more slen-
der figure with greater movement is shown in his *Fillet-
binder* (British Museum), and the standing figure is further
elaborated in *The Wounded Amazon.*

Fig. 34 Satyr swinging a maiden, beaker, c. 450 B.C. *Berlin Museum*

Fig. 35 Painted lecythus. *Boston Museum of Fine Arts*
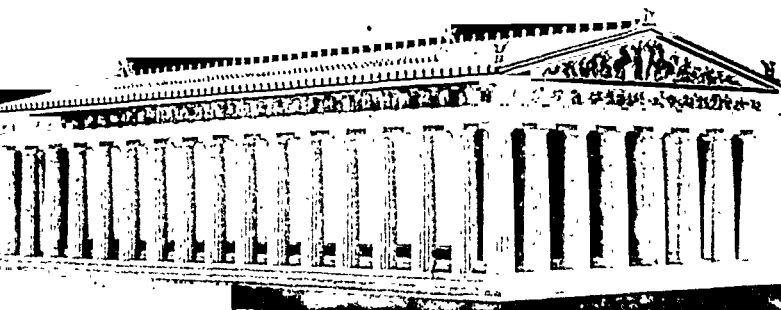
Fig. 36 Model of Parthenon. *Metropolitan Museum of Art, bequest of Levi Hale Willard, 1883*

Fig. 37 Erechtheum, north porch, Acropolis, Athens. *Alinari*
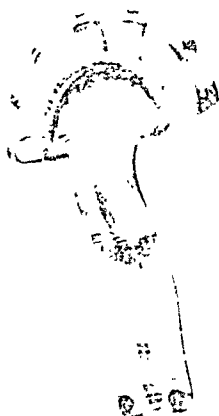
shades of red and brown. The moldings above and below the carved panels are a repertoire of the finest Greek architectural motifs, executed with exquisite finish.

Hellenistic (323–146 B.C.) and Greco-Roman Period (146 B.C. to about 1 A.D.). Alexander the Great conquered the Persian Empire, and so brought its countries into intimate contact with Greek civilization. New and larger cities outside of Greece became centers of commerce and of art; Alexandria in Egypt, Antioch in Syria, and Ephesus and Pergamum in Asia Minor. Athens continued as the center of classic art, but no longer played a leading part, and Alexandria continued the tradition of fourth-century Greece. The greatest contribution came from Pergamum and Rhodes. Pergamum became preeminent due to the enlightened patronage of the local dynasty of Attalid kings, beginning when Attalus called in Greek sculptors to make statues to commemorate his victories over the Gauls in 241 B.C. The sculptors founded the most vigorous school of Hellenistic sculpture, the first school of Pergamum. *The Dying Gaul* (Ill. 45) is represented as mortally wounded and reclining on his shield, resigned to death. Great skill is displayed in the anatomy; differences of textures, i.e. in hair and skin, are indicated, and the surface is highly polished. In its expression of pain and its realistic treatment, the statue is characteristic of the Hellenistic period.
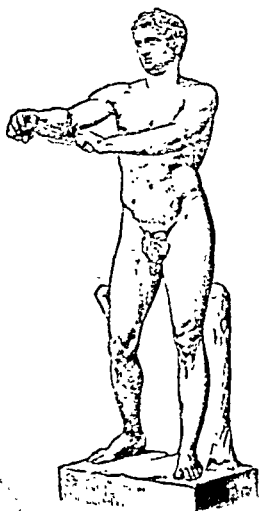
Ill. 44 Lysippus: Apoxyomenos, Vatican, Rome. *After Lübke*

Under Eumenes II, the son of Attalus, Pergamum was made into one of the most beautiful cities of antiquity (197 B.C.). On its fine Acropolis were public buildings, temples, the celebrated library, and the huge *Altar of Zeus*, one of the seven wonders of the ancient world. On a great quadrangular base, over 100 feet in width, the altar itself stood on a platform in an open court, surrounded by colonnades. Two friezes decorated the structure; the larger frieze on the base, representing a battle between gods and giants, is the most extensive and characteristic example of Pergamene art. About one-half of this frieze was preserved, and after decades of painstaking work, reconstructed in the Berlin Museum, where it stood

until the fall of Berlin in the Second World War. Giants
and gods are interwoven in a closely packed, vigorous compo-
sition, overwhelming in its richness and complexity. One of
the best preserved is the group in which Athena seizes the
hair of a young giant (Fig. 30). Some of the destruction, as
in the missing or badly fractured heads, has been attributed
to iconoclasts of the early Christian period, who identified
the altar as the seat of Satan.
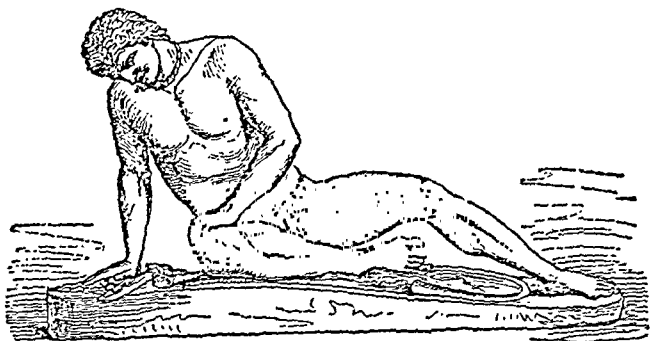
Ill. 45 Wounded and dying Gaul, Capitoline Museum, Rome.
After Lübke

A genre figure, like the *Old Market Woman* in the Metro-
politan Museum, is in the spirit of Hellenistic art, and un-
thinkable at any earlier age. The *Apollo Belvedere* (Ill. 46)
is a Roman copy in marble of a bronze original. In his left
hand, he held a bow and perhaps also an arrow; in his right,
he held a laurel wreath tied with ribbons. The lower arm
bent forward symbolized the healing power of the god, and
his light vigorous gait indicated, according to Adolf Furtwän-
gler, that *Apollo* was not following the flight of an arrow,
but looking about in all directions, as the saving and healing
god who wards off evil. An earlier age turned to this statue
to demonstrate everything that was thought to be fine in Greek
sculpture. Modern criticism has reacted against such ex-
travagant praise; with our more comprehensive knowledge of
Greek sculpture, there is no need to single out this statue as
an embodiment of all classical beauty. The well-known
Artemis of Versailles (Louvre) has the same slender pro-
portions and energetic stride.

No work of Greek sculpture has attained such popularity
as the *Venus of Melos* (Louvre) and for some it is the finest
Greek statue known (Ill. 47). It was discovered in 1820 in a
grotto on the island of Melos, in two parts which fitted to-
gether. Many attempts have been made to restore it. The left

arm may have rested on a column and the right hand may have held the garment (Fürtwangler). According to another view, the left hand held a shield of Ares, used as a mirror. Typical of an eclectic period, the pose expresses a compromise between draped fifth-century and nude fourth-century figures. The smiling mouth and the eyes fixed on the distance are like Praxiteles; the smallness of the head derives from Lysippus. The breadth of modeling and a certain grandeur of

Ill. 46 Apollo of Belvedere, Vatican, Rome. *After Lübke*

conception relate the statue to the style of Phidias. Only an eclectic period is capable of combining inspirations from several periods. The work is by an unknown sculptor of the second century B.C.

Almost as well known is a statue of *Victory* (Louvre), *the Nike of Samothrace,* an original marble statue by an unknown sculptor (Fig. 31). It had been set up in the open country to commemorate a naval victory fought in 306 B.C. The statue is generally admired as one of the most powerful works of sculpture in any period. *The Victory* is represented as standing on the prow of a ship, her right hand holding a trumpet, her left, a trophy. The motif is known from a coin, and the prow itself is set up in the Louvre. The treatment of drapery resembles that of the Parthenon sculpture; the thrust of the uplifted chest and right shoulder stretch the transparent folds across the abdomen, and the unbent right knee is set firmly against the onrushing wind. So convincing is the impression conveyed by the posture of the figure that the absence of arms and head is hardly noticed. The statue is now believed to be of the Greco-Roman period.

In 146 B.C. Corinth and Carthage were conquered and Greece became a Roman province. Greek statues were taken by the conquering Roman generals, who ransacked Athens, Olympia, and Delphi and carried off the great masterpieces
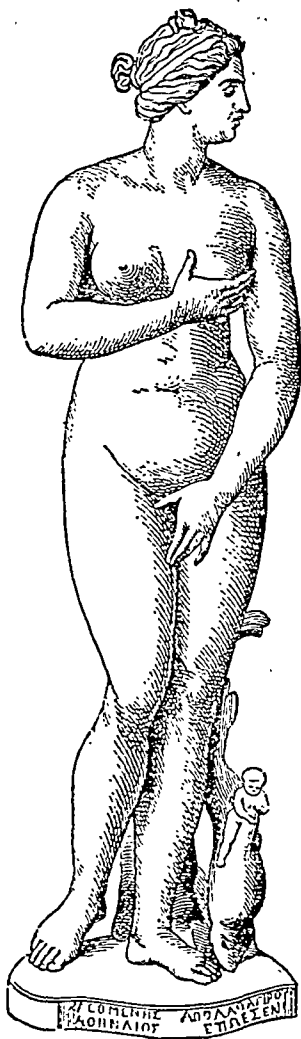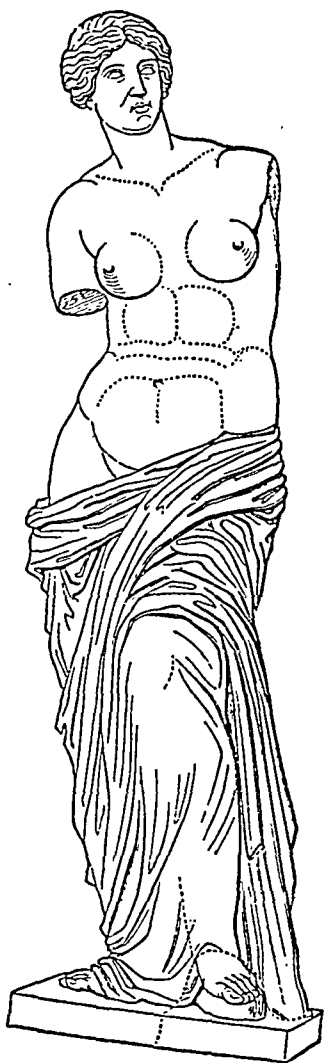
Ill. 47 *(upper left)* Venus of Melos, Louvre. *After Seemann*
Ill. 48 *(upper right)* Venus dei Medici, Uffizi, Florence. *After Lübke*

for the decoration of the public buildings and private villas of
Rome. Nero is said to have taken 500 bronze statues from
Delphi alone, and there were still enough left for Pausanias
to write about. When original works could not be procured,
the Romans employed Greek artists to produce copies; these
artists are known as the Neo-Attic school. *The Torso Bel-*
vedere, signed by Apollonios of Athens and admired by

Michelangelo, is thought to represent Hercules playing a lyre. It is a careful study of anatomy and has life and vigor. The best-known adaptation of the Venus type by a sculptor of the Neo-Attic school is the *Venus dei Medici* (Uffizi). The statue follows the Cnidian *Venus,* but her gesture is self-conscious, seeming to say, "Don't look!" Though in bad taste, it is technically well executed, beautifully proportioned, delicate in contours and modeling, with a highly polished surface (Ill. 48).

Roman influence was less dominant in Asia Minor, where the Hellenistic tradition was followed. At Rhodes near the harbor stood (*c.* 280 B.C.) a bronze statue of the sun god Helios, *the Colossus,* one of the seven wonders of antiquity. It fell in an earthquake (224 B.C.) and, broken in two, lay on the ground for nine centuries before the remains were sold for scrap. We do not know what the statue looked like, but it was over 100 feet high and hollow, with a staircase inside. Two colossal marble heads of a late date show the dignity and mildness of *Hera (Ludovisi)* and a bearded *Zeus (Otricoli),* whose mighty forehead was intended to convey his intellectual power. The *Laocoön* group (Ill. 49), an original work in marble by Hagesandros, Polydoros, and Athenodoros in the Pergamene tradition, is an extreme example of late Hellenistic style (*c.* 150 B.C.). G. E. Lessing used *Laocoön* as an illustration of Virgil's description of the difference between sculpture and poetry. Laocoön, a Trojan priest, in trying to save his sons from serpents was himself killed by them as punishment for having desecrated a sacred offering, the wooden horse left by the Greeks before Troy. The outstretched hand of the younger son is wrongly restored; it should fall toward his head, and the right hand of Laocoön should be bent back toward his head. Every device is used to dramatize physical pain, as in the father's head, bent back, his open mouth, knitted brow, swollen veins, and tense muscles. The realism is more apparent than real. The snakes do not strike like real serpents, but bite like dogs, and are more decorative than zoologically convincing. Without any suggestion of guilt indicated in the group itself, the effect is one of horror rather than tragedy, perhaps as a result of the concepts of the sixteenth-century restorers.

Painting. All works of the great painters Apelles, Zeuxis, and Polygnotus have perished, but we know of them through literature. Greek authors have more to say about these painters than about Phidias. The best evidence as to the periods of the great painters comes from the drawings and compositions on vases.

GREEK ART

Between the Mycenaean period and the first purely Greel style in vase painting, the black-figured style of the sixt century, there are two more primitive styles; the geometr style from 1100–700 B.C. and the so-called orientalizing sty

Ill. 49 Laocoön group, Vatican, Rome. *After Lübke*

of 700–600 B.C. Greek vase painting falls into three roughly chronological groups which somewhat overlap: the black-figured, the red-figured, and the white-ground style. *The Warrior vase* portraying a woman bidding farewell to departing warriors, is an example of the Mycenaean period before 1000 B.C. The style of this vase represents the end of a naturalistic tradition.

The Dorians brought with them a rectilinear geometric style in decoration (Ill. 50). The term Dipylon culture, named after the first discovery in Athens near the Dipylon gate; has been applied to the geometric vases of Attica, large terra-

cotta vases placed over tombs. In brown and black, the patterns are carried out in horizontal stripes, meander bands, triangles, zigzags, squares, rhombuses, and chevron patterns. Birds and animals are introduced as part of the abstract type of decoration; the figures themselves are symbols of man in the abstract. There is no trace of naturalism; the Dipylon style is a purely geometric style of European and northern origin, handed down from Neolithic times and merged with Mycenaean and oriental influences.

The orientalizing style of the seventh century represents a move from east to west, from Phoenicia, Egypt, the Ionian cities of Ephesus and Rhodes to Greece. The ornamentation shows oriental motifs like the lotus and the palmette, fabulous monsters like griffins and sphinxes, Mycenaean spirals and natural plant motifs. Vacant spaces between the animals were filled in by dots, rosettes, zigzags, and other designs. Processions of decorative animals (Ill. 51) are introduced and the decoration is more varied and more skillful than in the geometric style.

With the appearance of figures, the eye is a convenient detail by which to check on the trend toward naturalism. In

Ill. 50 (*upper left*) Dipylon ware, British Museum. *After British Museum catalogue (1908)*

Ill. 51 (*upper right*) Corinthian vase with frieze of animals, Louvre. *After Collignon*

the course of a century and a half, from about 625–475 B.C., the drawing of the eye changed from straight front view to the correct profile view.

Other noteworthy groups of vases precede those of the black-figured style. A typical example is the so-called *Arkesilas Kylix* (cup) of the Louvre (*c.* 570 B.C.), portraying King Arkesilas II of Cyrene seated on his throne on the deck of a ship. Silphium, the most important export article of Cyrene, is being weighed on scales and carried by men to the hold of the ship. From the end of the seventh century is a famous pinax, shaped like a soup bowl, of Ionic design (Ill. 52), made in Rhodes and exported from Miletus.

Ill. 52 Combat of Menelaus and Hector over Euphorbus. *After British Museum catalogue* (*1908*)

Two warriors, Menelaus and Hector, dominate the composition, which is striking in its lights and darks. There is a considerable amount of oriental filling ornament, and in the upper center two eyes are included to ward off evil; a guilloche border is at the bottom.

Archaic painting shows the same vigor and freshness as archaic sculpture. Vase painting emphasizes man and his doings in warfare, athletics, dancing, and drinking; the artists tell the myths and Homeric legends more as if these were tales of their contemporaries rather than tales of their

ancestors. The use of many colors on a small area disappears in the sixth-century black-figured style, and the clay becomes a warm reddish surface against which the figures stand out in a simple contrast of black with a metallic luster. Attention is concentrated on drawing; decoration, invention, and profile figures are new achievements in this period.

The outline and elongated volute handles give a stately character to the famous *François vase* (Fig. 33). The painter Klitias introduced a degree of refinement in the figure drawing which marked Athenian vase painting as superior.

From the top down, we have (1) Calydonian Boar Hunt, (2) Funeral Games for Patroclus, (3) Procession of Gods to the Wedding of Thetis, (4) Troilus persuaded by Achilles, (5) Base: Battles of Pygmies with Cranes. Archaic traits are in evidence; profile shoulders and frontal views are used, as well as the "bent knee" formula to convey an impression of swift motion. The drawing is rectilinear and angular, particularly noticeable in the horses.

Greek art came into its own with the black-figured style. As in sculpture, vase paintings reflect the conflict of the artists between stylized formality and natural appearances.

Ill. 53 Epictetus kylix, British Museum.
After Furtwängler and Reichold

The leading masters of the fully mature archaic style were Exekias and Amasis. In this severe style the figures are restricted to a frame instead of spreading over the whole surface of the vase. A masterpiece of all periods is the *Kylix of Exekias*, showing Bacchus sailing a boat, his grapevine growing boldly and gaily from a heap of earth inside

Ill. 54 Euphronius: Heracles and Antaeus krater. *After Bauveister*

83

the boat. It is a charming fantasy, imbued with the Greek
spirit of carefree abandon and appropriate to the god of wine.
Another masterpiece by Exekias is the amphora representing
Achilles and Ajax playing draughts (Vatican). The shape
shows a gradually swelling profile; neck and body merge
without break. Black silhouettes are enhanced by ornamen-
tation, which turns the clothes into delicate patterns, making
them look like woven sheets of thin gauze. In hands and
feet, these elegant shapes diminish into tapering ends.

The red-figured style is well represented by an Epictetus
kylix (Ill. 53) with interior central medallions in which the
painter shows great skill. Naturalism is seen in the lively
poses, the turn of the dancing girl's head, and the zigzag
folds over the shoulder of the flutist. An important kylix,
signed by the great master Euphronius (Ill. 54), shows Her-
acles' struggle with the giant Antaeus. The figures are large
in scale; there is considerable interior drawing outlining the
muscles and well-drawn feet and hands, as in the upturned
right hand of Antaeus. Euphronius was the ranking master
of the so-called severe style. He was both a potter and

Ill. 55 Pan-Master: Death of Acteon krater, Boston Museum
of Fine Arts. *After Furtwängler and Reichold*

frieze reappears in two maenads (Ill. 57) and in an amphora by the so-called Achilles Painter (c. 450 B.C.). This drawing seems to exist solely to provide pleasure to the eye.

Vases with a white background show the same progress in skill of drawing as appears in the red-figured style. A group of white-ground lecythi, cylindrical vases with high narrow necks, show funeral customs. Most of them are

Ill. 57 Two maenads from an amphora. Cabinet des Médailles, Paris. *After Furtwängler and Reichold*

Athenian, and, like other vases, many were exported. A well-known example in Boston (Fig. 35) shows a dead warrior standing before his tomb; on the other side is a maiden about to present a funeral offering. Her drapery was once painted over the nude figure in a pigment that has disintegrated. For sensitive drawing as well as for sentiment, it is one of the masterpieces of drawing of all time. As vases have been recovered from tombs, it is presumed that they were placed there to be used in a future life after death. Some were

found deliberately broken, a custom familiar to other cultures; this seems to be a projection of death to the object broken, thus establishing a bond between the man and his possessions. Shapes similar to those found in tombs no doubt were used in life. The kylix was a drinking cup; the amphora was used for storing wine and liquids; the three-handled hydria was for water; and the krater was a mixing bowl. These are a few of perhaps twenty known shapes (Ill. 58).

Architecture: Archaic Temples. The Mycenaean Bronze Age had no temples, but the temple was developed to a high state of perfection during the period of Pericles and, once perfected, remained unchanged. The cella of the temple is derived from the megaron, the men's hall of the old Mycenaean palaces, as palaces would naturally be thought proper for the gods. The Doric style was that of the Greek mainland. The other style of Greek architecture, the Ionic, was intro-

Ill. 58 Shapes of Athenian vases. *Guide, Greek Collection, Metropolitan Museum of Art*
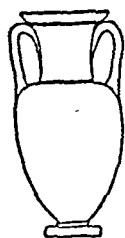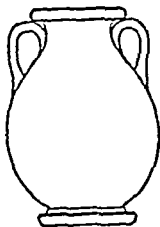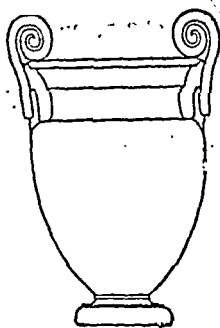
Amphora
Pelike
Volute Krater
Loutrophoros
Calyx Krater
Column Krater
Bell Krater
Stamnos
Psykter
Hydria
Lebes Gamikos
Lebes
Lekythos
Squat Lekythos
Oinochoe
Kantharos
Kylix
Stemless Kylix
Skyphos
Aryballos
Alabastron
Pyxis
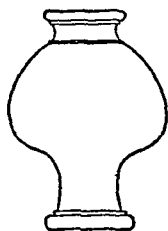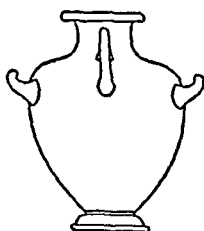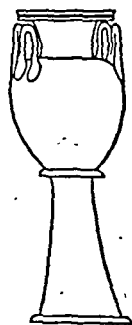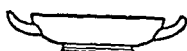
duced to Athens from the islands and Asia Minor. The Doric order in stone was evolved partly from wood architecture and partly through innovations that were initially worked out in stone. These archaic temples have been preserved only in ruins in Greece (Olympia, Corinth), in southern Italy, in Sicily, and on the island of Corfu. Sicily has several temples at Selinus, one of which (Temple B) was the largest Greek temple of antiquity. In the tympanum Temple C appears to have had a huge *Gorgon's Head*, 9 feet in diameter and made of terra cotta. The limestone was sheathed with terra cotta in red, black, and buff to produce an effect of massive vigor and brilliant color.

The Acropolis of Athens. Architecture reached its highest development on the Acropolis (*acros*, "high"; *polis*, "city"), the upper fortified part of the city of Athens, during the administration of Pericles (450–430 B.C.). Civic buildings were not developed, as the Greeks lived an outdoor life. The ruins of the *Parthenon*, once the most perfect Greek building, are famous today and a major tourist attraction. Ictinus and Callicrates were the architects. The finest example in the Ionic style is a smaller temple, the *Erechtheum* (421–405 B.C.). The *Propylaea* (437–432 B.C.), the monumental entrance to the Acropolis, was never completed. The placing of the temples (Ill. 59) was informal; for instance, an uneven spot near the edge was selected for the Erechtheum because that ground was sacred. As a result, the Erechtheum was built on two levels and three porticos were combined, demonstrating an unexpected elasticity of Greek architecture. Models of modern restorations of the Acropolis give a total impression of the buildings. The Greek temple, like the Egyptian, was not intended for a congregation; the cella was a place for the statue of the god. How the interior was illuminated is not clear—probably through the open door.

Doric Order. All Greek architecture used the post-and-lintel system. The Doric columns, fluted and without base, support the entablature and the roof, which was covered with marble tiles and had a gable, or pediment, at either end. The structure will be clear from a study of the illustration (Ill. 60). The original effect of the Parthenon (Fig. 36), in addition to its basic design, owes something to the appeal of the finely grained marble, to the added use of color, and to subtle curves of lines that ordinarily would be straight. The stylobate, the topmost of the three steps on which the columns rest, rises in the center about 2¾ inches on the ends and 4 inches on the long sides. The profile of the column tapers and is slightly curved (entasis) and so is the echinus (*see* Ill. 60); the columns lean inward; the angle columns have a
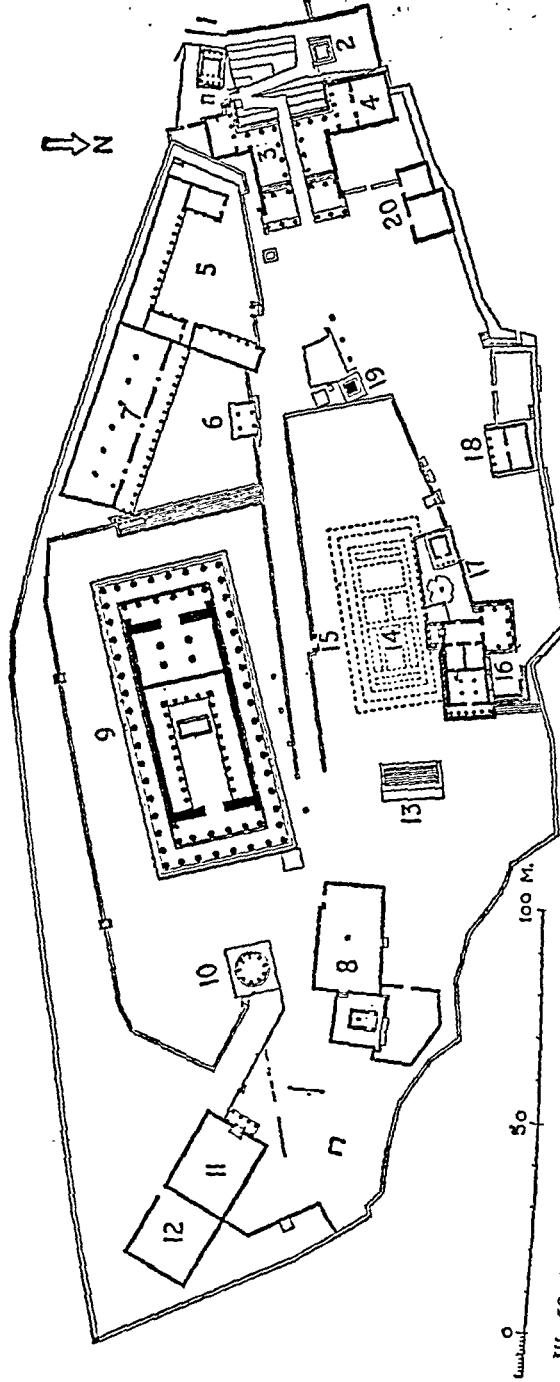
Ill. 59 Acropolis, Athens, plan. *After G. P. Stevens, courtesy I. T. Hill. The Ancient City of Athens, Methuen (1953)*

1. Niké Temple. 2. So called Monument of Agrippa. 3. Propylaea. 4. Picture Gallery. 5. Sanctuary of the Brauronia Artemis. 6. Propylon. 7. Chalkotheki. 8. Precinct of Zeus Polieus and Boukoleion. 9. Parthenon. 10. Temple of Roma. 11. Heroon of Pandion. 12. Service. 13. Great Altar of Athena. 14. Old Temple of Athena. 15. Propylon. 16. Erechtheum. 17. Pandroseum, Temple of Pandrosus, Sacred Olive Tree, Cecropium. 18. Dwelling of the Arrephori. 19. Promachos. 20. Service Building (?)
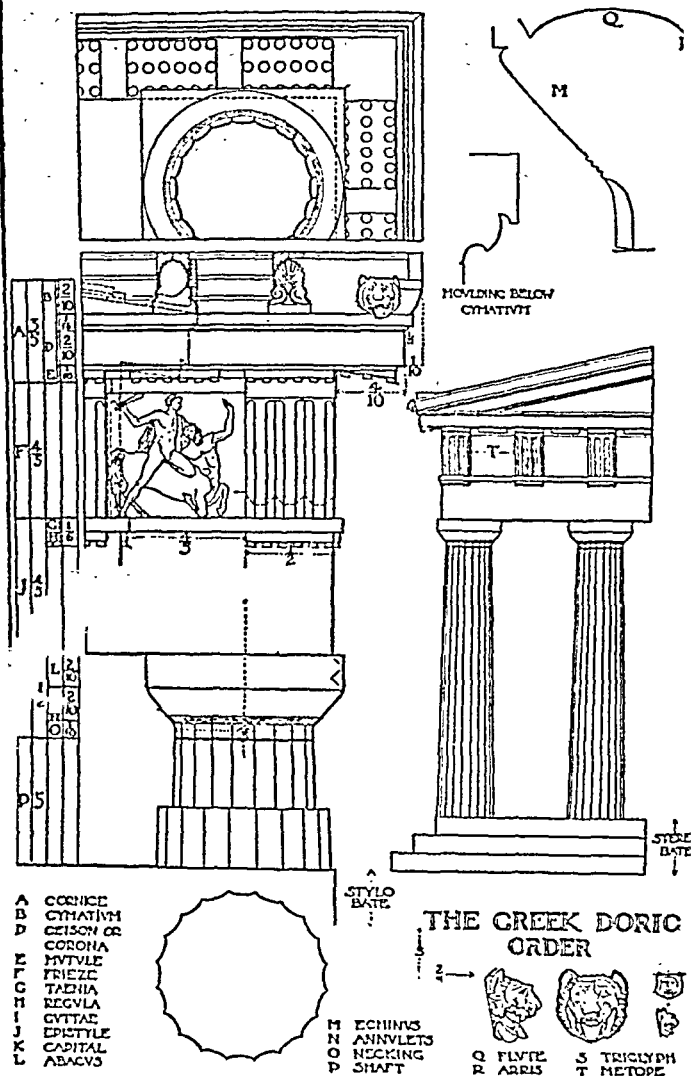
Ill. 60 Greek Doric Order. *After H. L. Warren*, The Foundations of Classic Architecture *(1919), courtesy Winnifred B. Warren*

double inclination; the face of the cornice, the abacus (*see* L Ill. 60), and the moldings lean out. These curves and inclinations are not obvious, but can be detected; they have been measured in modern times (Francis C. Penrose), and have been described by Vitruvius in the Roman period. The explanation offered is that the curves offset the optical illusion of sagging given by straight lines; it may be simply that the Greeks found curves to be pleasing. The Ionic order curves are less emphatic.

The Greeks experimented with proportions of height to width, reaching the finest solution on the exterior of the Parthenon (Fig. 36). Greek architecture aimed at external appearance suggestive of unity and strength; interior design and architecture's capacity to create effects of great spaciousness remained undeveloped. Columns were left unadorned as structural members to carry the superstructure (Ill. 61). Only those parts that carry no weight, the tympanum of the pediment and the metopes, were sculptured. A logical appeal to reason found its expression in dealing differently with the structural parts—structure and decoration do not fuse: the columns have flutes but no carving and there are purely decorative parts such as the sculptural and painted decorations. The lintels are structural, hence uncarved; the triglyphs are structural and have grooves like the flutes of columns. Logic and clarity were the controlling principles; there was no mysticism. Construction was as highly developed as design. Columns consisted of drums ground and doweled together; metal clamps were used, but no mortar.

At the time of Emperor Justinian (*c.* 450 A.D.), the Parthenon was made into a Christian church and altered accordingly. In 1453 the church became a Turkish mosque and a minaret was added. In 1687, in a war between Venetians and Turks, the Venetians blew up the buildings, which had been used to store powder, causing a fire. Early in the nineteenth century, Lord Elgin acquired fifteen metopes and a few figures from the east pediment for the British Museum, where they have been preserved. All medieval and Turkish additions were cleared away when Greece became free of Turkish rule (1836).

Ionic Order. Compared to the sober Doric, the Ionic (Ill. 62a) is luxuriant; it has more parts, is more slender in proportions, and has a scroll, or volute, capital. Moldings are carved instead of painted, as in the Doric. The Ionic frieze was sculptured, but had no metopes nor triglyphs. Columns had bases and shafts and more flutes separated by narrow bands called fillets (Fig. 37). The Ionians occupied Asia Minor and Attica on the Greek mainland, and in
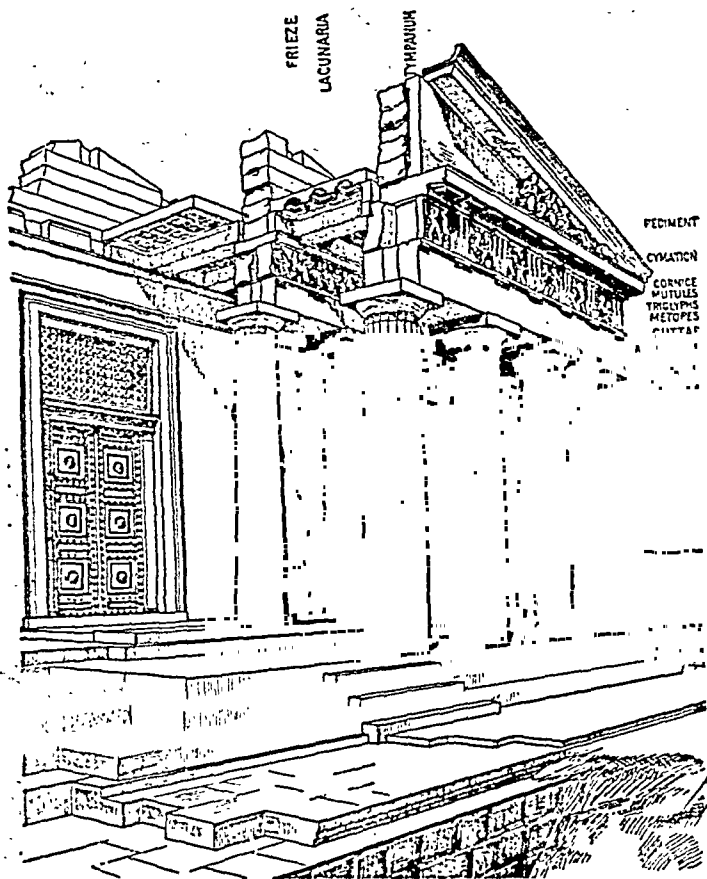
Ill. 61 Parthenon, sectional view. *After British Museum catalogue*
(*1908*)

Athens the Ionic style was refined and simplified. The verti-
cal volute capital was used by the Persians (Ill. 36); in
Greek art the volutes were placed horizontally. Several theo-
ries have attempted to explain the origin of the Ionic capi-
tal, such as coils of rope, metal and plant forms; it has been
related to Egypt and Babylonia, but an indigenous Greek
development has also been claimed.

The *Erechtheum* mentioned above has been attributed to
Mnesicles and has been called the most beautiful example
of the Ionic order. It certainly became the most favored.
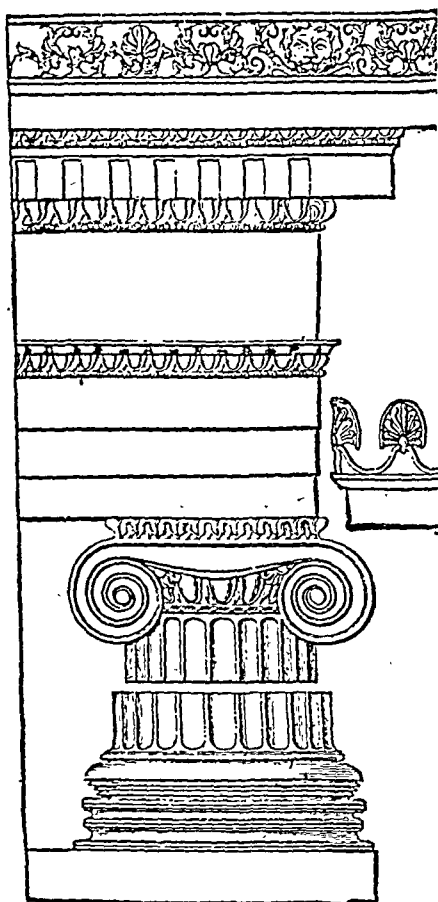
Ill. 62a Greek Ionic Order. *After C. H. Caffin*, History of Art (*1913*)
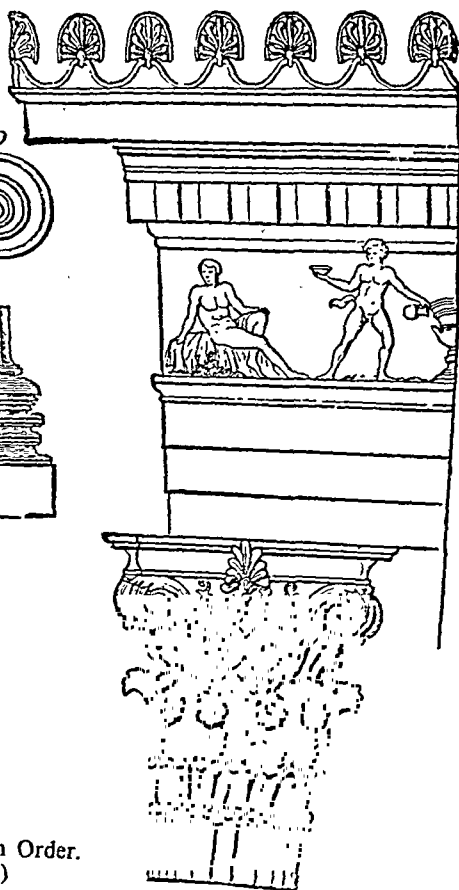
Ill. 62b Greek Corinthian Order. *After Caffin* (*1913*)

judging by the many times it has been copied in modern architecture (Fig. 37). The corner capital shows volutes on front and side; the frieze is in dark blue marble, the rest, in Pentelic marble. The doorway in the wall behind the porch, the entrance to the shrine of Poseidon, is distinguished for its elegance and its proportions (height about two and a third times the width). In its ornamental frame (Ill. 63), a wide flat band set with rosettes stands in striking contrast to the inner moldings. The marble is carved with jewelrylike precision and is properly relieved by flat uncarved bands. This most famous doorway in architecture often has been copied in modern bank buildings in the United States. The Ionic capital (Ill. 62a) is admirable in every detail; the eye of the volutes probably had gilded bronze disks cemented in place; metal strips followed the convolutions, which ended in palmettes to fill in the triangular spaces left in either corner. The so-called egg-and-dart moldings show lengthy ovals; the space above the ends of the flutes was filled in with a carved anthemion in which palmetto and conventionalized flowers alternated. White marble was enhanced

Ill. 63 Erechtheum, restoration of doorway, north porch, Athens. *After Lawrence (1957)*

by color and gilt and particularly by light and shade and cast shadows; brilliant sunshine is necessary to bring out the full glory of Greek architecture. The south porch is distinguished by the use of six caryatid figures, sturdy draped female figures used in lieu of columns. One of the figures is in the British Museum and has been replaced by a terra-cotta replica.

A beautiful example of a smaller Ionic temple is the *Temple of Nike Apteros (Wingless Victory)* on the southwestern slope of the Acropolis. Its marble balustrade is

carved in relief with winged Nikes. The finest exámple, *Nike Tying Her Sandal* (Acropolis Museum), rivals the *Three Fates* in the exquisite drapery revealing the form underneath. In addition to the ones here discussed, there are perhaps a dozen Ionic buildings, mostly temples, in Greece, on the islands and Asia Minor.

A variation of the Ionic order is the bell-shaped Corinthian capital, which is enhanced by sharply defined acanthus leaves. It is probably the most elaborate single architectural ornament ever developed in Western art. The Corinthian capital was first used in Athens in the small circular choragic monument of *Lysicrates*, designed as a sumptuous pedestal for a bronze tripod won as a prize at a Bacchanalian festival in 334 B.C. The name of the monument perpetuated the sponsor of the winning team of the patron of art rather than the winners of the tripod or the architect.

Gems, Coins, and Metalwork. Gems were cut in intaglio, from which impressions were struck in wax or metal for seals. Semiprecious stones were used, as they were hard enough to stand wear but could be cut with simple tools. In antiquity seals served in place of modern locks and keys to safeguard property and as signatures at a time when few people could write. Dexamenos of Paros of the fifth century B.C., the most celebrated gem cutter, was as famous for gems as Phidias was for sculpture. Gems recapitulate in miniature the stylistic development from the archaic through the Roman period. Though small, they were engraved with exquisite finish in a style that often suggests the breadth of sculpture; and like sculpture, gems have their masterpieces. The subjects from mythology and daily life use animals and the human figure and repeat the same types. A heron spreading his wings is engraved on one side of a carnelian with delicacy and precision, and is well related to the oval shape.

For variety of invention and beauty of design, Greek coins are often superior to modern coins. A die was cut in a hard metal; the coin was then struck from the die by driving the coin into the die with a hammer blow. The relief was higher than it is nowadays, but since the coins were not uniform in size, they could not be stacked. Each Greek city had its own coins showing a head, a figure, or some attribute of a god.

Bronze was used more commonly in ancient than in modern times, not only in sculpture, but also for utensils and household furniture, vases, tripods, mirrors, and pins (safety pins called fibulae). Often these objects were beautiful in shape and elaborated with reliefs or incised designs. An extraordinary bronze in the Walter C. Baker private collection, a head of a griffin from a seventh-century cauldron, com-

Conclusion. Greek art was long regarded as having produced models that hardly could be surpassed. Though no longer imitated, Greek art is better understood today than ever before and, as a result, our appreciation of Greek art rests on a firmer foundation.

Various explanations have been offered for the conditions that made Greek art possible. Perhaps the climate gave the people something of the hardiness of the North combined with the relaxation that characterizes the countries of the East. The topography of mountains and valleys may have encouraged in the inhabitants a spirit of independence without isolating the settlements. Their closeness to the sea made the Greeks enterprising travelers to other countries, and love of sports gave sculptors an opportunity to observe the human body and increase their knowledge of anatomy. The simplicity of Greek dress, the availability of excellent marble, and the beauty of the country are often mentioned as favorable influences. Religious festivals and a common culture gave the Greeks a sense of solidarity and pride, and fostered competition as well. But climate, natural beauty, and fine marble existed before Greek art came into existence and continued after it had run its course. Moreover, a similar background is found in other regions which produced no comparable development in art.

We must look for additional causes; the small city state is one. Attica was smaller than the state of Rhode Island, and Athens at the time of Pericles had about 40,000 citizens in a total population of between 200,000 and 300,000. Athens was a self-governing community; citizens took an interest in public affairs, and even religion was subservient to the needs of the state. Greece never developed a powerful priesthood, as in Egypt. The development of free thought culminated in philosophy, in literature, and in a cult of beauty, and gave background and content to the visual arts. In all cultures, the arts reflect the intellectual climate; they do not by themselves create it. How the talents of artists are utilized depends on the culture, which in Greece emphasized the free development of all human potentialities, including the arts.

It also happened that Pericles was fortunate in having surplus funds available, as Athens had been the treasury of the Delian League. These funds were freely used to beautify the city. If we think of freedom of thought as a basic condition which combined with other favorable circumstances, we may come closer to understanding why. in the course of a few centuries, the arts developed in such a spectacular fashion in Greece.

bines the vigor and elegance of the archaic period at its
best (Fig. 38).

The use of precious metals, which was already highly de-
veloped in Mycenaean art, was brought to a new high of
perfection during the Hellenistic and Roman period. All tech-
nical processes were employed in silverware found at
Boscoreale (Italy) and at Hildesheim (Germany). Silver plates
and silver vessels found at Hildesheim (1867) probably be-
longed to a traveling table service of a Roman nobleman of
the Augustan period. A large mixing bowl (Ill. 64) about

Ill. 64 Silver mixing bowl from Hildesheim, Berlin Museum.
After Lübke

18 inches high is one of the finest of the set. Two stylized
griffins at the base are part of a pattern of delicate tendrils
that spread across the whole surface. Little cupids perched
astride the tendrils are attacking marine animals. The style is
in the Hellenistic manner of Alexandria, except for the
naturalistic tendrils and leaves, which are in the taste of the
Augustan period.

Etruscan and Roman Art

Etruscan Art (800 B.C.—Empire Period). The ancient Etruscans settled in central Italy and at one time dominated most of Italy. Though conquered by the Romans, they were not wholly integrated with Roman culture until the period of the Empire. Their origin, like their language, has remained obscure; the most plausible theory is that they came from Asia Minor, though some authorities have claimed a northern or a native Italian origin. Before the Etruscans were absorbed in the general population, they developed an art of their own, in which the most potent influence was Greek. According to the nineteenth-century point of view, Etruscan art was provincial Greek art; the trend today is to accord to Etruscan art a measure of individuality, without denying a Greek contribution. Some Etruscan contributions to Roman art were the semicircular arch, stone masonry using large blocks usually without mortar, and the temple raised on a platform and with a deep porch in front.

Painting. Except for painted terra-cotta plaques, Etruscan paintings have survived only on the walls of underground tombs; they once existed in public and private buildings as well. Of the many paintings in the Etruscan cemeteries of Tarquinii (near Corneto) and Chiusi, only a few have been preserved. The most flourishing period was in the two above-mentioned cities, though there are other places with painted tombs, such as Orvieto, Vulci, and Caere. Some were known at the time of the Renaissance; others have been discovered and studied since, particularly during the nineteenth century. In certain instances paintings have been successfully lifted from the walls and transferred to museums.

The tomb was the "eternal home" of the soul, which, according to Etruscan beliefs, survived after death and had to

e provided for. The earlier paintings show scenes of daily
ife, banquets and dances in which the dead man participates.
The paintings probably imitate those of the houses of the
living in order to provide the owner with the pleasant things
of life. During the later period, the subjects of the paintings
relate to a land of the dead, a counterpart to the Greek
Hades.

The tomb paintings are original paintings by the best art-
native Etruscans or Greeks, and not imitations of well-
n Greek masterpieces. Therefore they vary in style ac-
ng to the period; the early seventh- and sixth-cen-
style is archaic and, like Greek art, shows an orientaliz-
nfluence. A painting from the Grotta Campana at Veii
65) shows a polka-dotted horse, sturdy Doric-like figures,
a hunting leop-

. The space is
d with ornamen-
plant motifs, as
the orientalizing
le of Greek vase
inting. The same
luences that came
Greece from Asia
linor also were felt
Italy (Etruria);
ence the stylized lo-
us tendrils filling in
he vacant spaces.

Ill. 65 Etruscan wall painting from
Veii, Grotta Campana. *After Martha*

The freer fifth-
century style is well
illustrated in the decorations from the Tomb of the Triclinium
(c. 470 B.C.), transferred to the Museum of Tarquinii. One
painting is of a banqueting scene; others from the side wall
show dancers. A dancing pipe player (Fig. 39), surrounded
by birds and flowers, is represented in profile with the eye in
front view. The flowing curves, bold and self-assured, give this
figure a buoyancy which is unlike anything Greek or Egypt

The pleated drapery recalls the contemporary Greek Ionian style of the *Maidens of the Acropolis*, but the modeling is more vigorous and the forward step, energetic, so that this figure has been called the *Walking Apollo*. Color, black hair, ivory drapery, and a dark-brown flesh tint add to the effectiveness of the statue.

The Etruscans were known for their metalwork, bronze sculpture, and jewelry. The *Orator* (Florence, Archaeological Museum), of the fourth century B.C. or later, may represent a Roman. It was made by an Etruscan artist, perhaps as a votive figure (Massimo Pallottino). The portraitlike head of this statue, as well as another portrait, *L. Junius Brutus*, indicates the Etruscans' famous capacity for realistic portraiture. However, as Greek artists also worked for the Romans, archaeologists often differ as to whether a work like the Brutus head is Etruscan or Greek.

Imperial Roman Art, 31 B.C.–313 A.D.; Emperor Augustus to Constantine. Roman art existed during the Republic, but it was Octavius, the first Roman emperor, under the name of Augustus, who made over Rome "from a city of brick to one of marble." Monumental architecture was fully developed during the Empire, and sculpture took on a Roman flavor during his reign. With Constantine, three centuries later, Christianity became the state religion, and the subject matter of art became Christian, although the style continued the Roman manner.

Roman art was exported to the provinces as far north and west as Scotland and Spain and as far south and east as North Africa and Syria; it was definitely Roman art, even though it was originally based on the Etruscan and Greek counterparts.

Architecture: Forums. The most characteristic expression of the Romans was architecture, and the most original aspect of Roman architecture was the concept of a building as a complex and spacious interior. In addition, the Romans developed the planning of many buildings to form a monumental group, related by means of a major axis and often minor axes as well. The forums from the *Forum Romanum*, the earliest, to the forum of Trajan (110–114 A.D.), the most magnificent, became centers of public life and places of trade and political assemblies. Up to the time of Julius Caesar the *Forum Romanum* had shops and was used as a market place. Under the Empire, shops and markets were cleared out and it became the center for law courts and other civic activities. All the forums in Rome had at least one temple; the Roman forum had six, in addition to other buildings, a platform for orators (rostrum), triumphal arches,

columns, and many statues. The plan of the forum of Trajan, designed by Apollodorus of Damascus, somewhat resembled the Egyptian temple plan, but was more varied. A broad court with columns on three sides and semicircular exedrae on two sides for shops was followed on the same central axis by a basilica and a temple. A monumental arched entrance replaced the Egyptian pylon. Where real estate is expensive, uneconomical use of land is not long tolerated. Nero's well-known fire in Rome appears to have been a slum clearance project, and later his own famous *Domus Aurea* (Golden House) was demolished to make room for the Colosseum.

The region of the imperial forums (*Fora Caesarum*) has been uncovered (since 1932) and is today crossed by the Via delle Fore Imperiale. Of the forums, incidental ruins which exist today are columns, which have been found among the debris of demolished houses which once covered the area and have been re-erected. Systematic work on recovering the ruins of the Roman forum started in 1871, on individual buildings, as early as 1803. The original pavement of the Trajan forum is still unexcavated, some 20 feet below the present street level.

Dwellings. Domestic architecture included the palace; the villa, or country house; the *domus*, or ordinary house; and the many-storied apartment house (*insula*). Excavations at Ostia show that the well-to-do lived in duplex apartments with living rooms and dining rooms two floors high (T. F. Hamlin). There were balconies and large windows with glass in the more expensive houses and transparent mica in the more modest ones.

The excavated ruins of Roman imperial palaces have brought to light an elaborate complex of rooms, courts, temples, libraries, baths, peristyles, fountains, terraces, and covered passageways adorned with statues, columns, marbles, and mosaics. The most extensive palace ruins are those of the *Palace of Emperor Diocletian* (284–305 A.D.) at Spalato, the modern Split, in Dalmatia on the Adriatic coast. Within the still magnificent ruins, live today one-fifth of the population of Split. The ruins of *Hadrian's villa* near Tivoli outside Rome cover hundreds of acres.

Remains of Roman houses have been found in many parts of the Empire, but the most complete are at Pompeii, as in the *House of Pansa*. All chambers in the one-story house opened upon interior courts, which provided light. The front of the house, facing toward the street, was given over to shops. The interior walls were wainscoted with marble or covered with painted decorations. Many of our modern comforts such as plumbing and heating were anticipated in Roman dwellings.

New Types of Buildings. The requirements of an empire
and a metropolis like Rome developed new types of buildings
on a larger scale than had ever been realized before. The
five-aisled basilica used colonnades and perhaps wooden
roofs, as in the basilica of Trajan's forum. The post-and-
lintel system employed by the Greeks was elaborated by the
Romans. They placed columns on pedestals to gain height,
and invented flattened wall columns called pilasters and so-
called engaged columns which, merging with the wall behind,
projected from the wall by more than half the column's diam-
eter. The more revolutionary Roman structures included
temples with spacious interiors made possible through the
use of barrel vaults, great baths with central halls erected on
groin vaults, and circular vaulted temples like the Pantheon,
now a Christian church. To these must be added places of
amusement, theaters of nearly semicircular plan such as the
Theater of Marcellus (23–13 B.C.), amphitheaters like the
Colosseum, circuses like the Circus Maximus, triumphal
arches, and finally tombs like Hadrian's (138 A.D.), now
Castel Sant' Angelo. For these new types the Romans de-
veloped a more practical type of construction that did not
depend on trained craftsmen but left much to unskilled
labor, thus making it possible to build in the Roman manner
in any part of the Empire.

Construction. This construction was made possible through
the use of the ground arch, the vault (Ill. 66–68), and the
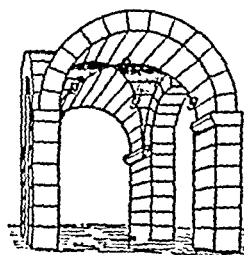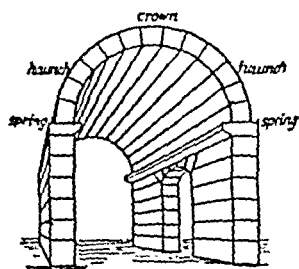
Ill. 66 (*upper left*) Barrel vault. *After Hamlin* (1909)
Ill. 67 (*upper right*) Groined vault (*g, g,* groins). *After Hamlin*
(1909)

dome on a circular base. Generally the material was concrete
faced with brick, though cut stones of enormous size were
also used, particularly in Syria at Palmyra and Baalbec. Con-
crete was most common for massive structures, as it was
economical and saved labor. As raw materials for concrete,
Italy had—in addition to stone—lime and a volcanic prod-

uct, pozzuolana, which made an excellent cement. Small vaults were cast in concrete on wooden molds called center-ings; large vaults were built with light ribs of brick, and the concrete was filled in between the arches (Ill. 68) forming a monolithic mass. The Romans used heavy walls as abut-ments, often needlessly,
as the concrete vault was like a lid which exerted no outward thrust, in the manner of a masonry vault.

The Romans, among the world's best engi-neers, built roads and bridges like the great bridge at Alcantara in Spain (617 feet long, 180 feet high) that are in use
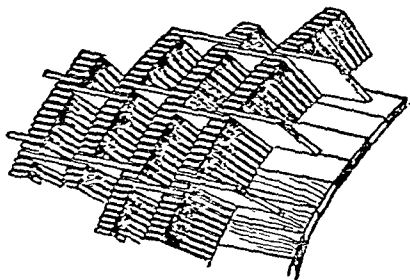
Ill. 68 Brick ribs of barrel vault. *After Simpson (1929)*

today. Water was brought to Rome from the mountains through fourteen aqueducts. The finest example in southern France is the famous *Pont du Gard* near Nîmes. Three tiers of arches, one above the other, conduct the water across the river valley 150 feet below. Such structures were not only utilitarian and constructed as if to last for eternity, but they were also well proportioned and had a monumental grandeur which has won them universal admiration.

There is no single Roman building which combines the best aspects of Roman architecture as the Parthenon em-bodies the Greek. As major achievements, we may cite the Pantheon, the Baths of Caracalla, the vaulted Basilica of Constantine, and the amphitheater of the Colosseum.

The Pantheon, Built during the Reign of Emperor Hadrian (117–138 A.D.). The creation of vast interior spaces was the greatest Roman engineering triumph. The Pantheon (Ill. 69) was the largest circular structure ever built until modern times," and one of the most remarkable buildings in the world. Until Michelangelo built the dome of St. Peter's in Rome, the Pantheon was the largest interior without obstructing sup-ports. It consists of an immense rotunda 142 feet in diameter and 140 feet high. Walls 20 feet thick support a hemispheri-cal dome with a circular opening at the top 28 feet in diam-eter. This opening provides the only illumination. The single barrel-vaulted entrance has a huge bronze door, originally gilded. Niches of variegated marble within the thickness of the walls now contain altars; originally they were for statues of gods. Our section shows the interior as it was when it was first built. Each of the rectangular and coffered or re-
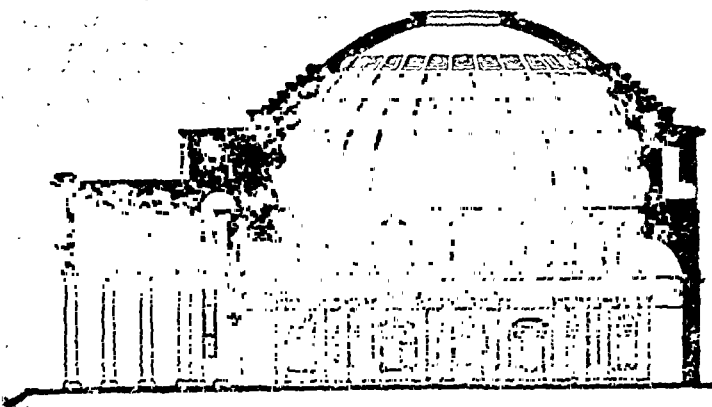
Ill. 69 Section of the Pantheon. *After Simpson (1929)*

cessed panels of the dome was once decorated with a bronze
rosette and with moldings in gilt stucco. The walls were lined
with rich marbles; the green porphyry and white marble at
the attic level has since been replaced with stucco. With
some exceptions, the decoration was applied to the brick walls
in the typical Roman manner of surface decoration. No other
type of decoration was possible; modern architecture sepa-
rates structure from ornamentation in the same way.

The portico of the exterior (Fig. 42) was originally a gate-
way to the garden of Agrippa. It was partially salvaged to
become the front of Hadrian's new circular temple. The frieze
still contains the name of Agrippa, son-in-law of Augustus.

A model of the restored Pantheon (Fig. 42) gives an im-
pression of its original splendor. The marble and granite col-
umns with Pentelic marble capitals contrasted with the gleam-
ing white marble stucco which covered the building. A sculp-
tured and gilded four-horse chariot (quadriga) and other
statues were placed above the portico and in front of the low
dome. Sculpture also included the gilt bronze pedimental fig-
ures within the steep gable, and gilt bronze roofing tiles added
to the lavish effect of the exterior. Today the Pantheon, though
complete in structure, is disappointing in the exterior, like a
wedding cake without its frosting. Instead of being hemmed in
by buildings, as is the case today, the Pantheon stood in a
circular piazza. It was also raised seven or eight feet above
the pavement, whereas today one enters from street level.

The Empire had public baths in towns from the Rhine to
the Sahara, and from the Atlantic to the Persian Gulf. Hot
baths, as well as outdoor swimming pools and colonnaded

courts, were part of many bathing establishments. An elaborate system of wall and under-floor spaces and flues conducted the heat, and storage tanks provided water for warm and hot baths. To ingratiate themselves with the people, Titus, Domitian, Trajan, Caracalla, Diocletian and Constantine vied with each other to construct ever larger and more magnificent baths. The Baths of Diocletian, the ruins of which still occupy many city blocks in Rome, are said to have accommodated 3200 bathers. "Of ordinary baths such as those found in Pompeii, there are said to have been in Rome over eight hundred" (Anderson and Spiers). Paris, Trier (Germany), Bath (England), Timgad and Leptis Magna (North Africa), and other cities have remains of Roman baths, some of them rivaling those of Rome itself.

Baths of Emperor Caracalla (211–217 A.D.). The most famous Roman baths are those begun by Caracalla (212 A.D.) and completed by Alexander Severus (223 A.D.). Even the ruins, the most extensive in Rome, though now bare and roofless, are impressive. For an appreciation of the original we must turn to the restoration (Ill. 70 and Fig. 41).

The great central hall or *Tepidarium*, a kind of lounge. (Fig. 41 and 2 in Ill. 70), was the nucleus around which a variety of halls, open courts, niches, and hemicycles were related. A main axis through the swimming pool (1, *Frigidarium*, Ill. 70), the great hall, and the circular hot bath (9, *Caldarium*, Ill. 70) divides the block into two symmetrical parts. This block was raised on a platform 20 feet high, leaving space for furnaces and service areas underneath. We cannot be certain of the use of each room, but the restored plan suggests the function of almost every section. What are here labeled private baths (14, Ill. 70), others have interpreted as shops. The main block, exclusive of surrounding areas, was about the size of the Pennsylvania Railroad Station in New York City and larger than the House of Parliament in London. The *Caldarium* had a diameter of 116 feet and may have been domed; the *Tepidarium* consisted of three groined vaults (108 feet high) illuminated by clerestory windows above the roofs of adjoining halls. The thrust of the groin vaults was concentrated on huge monolithic granite columns (38 feet high and over 5 feet in diameter and resisted by transverse walls behind carried as buttresses above the roof.

This system afforded an unencumbered spaciousness neither the hypostyle halls of Egypt nor the temples of Greece possessed. The gilt-coffered vaults covered with ornamental stucco, the use of the Corinthian order, the panels of colored and white marble for wall facings, and the pictured mosaic floors with figures of gladiators, athletes, and more
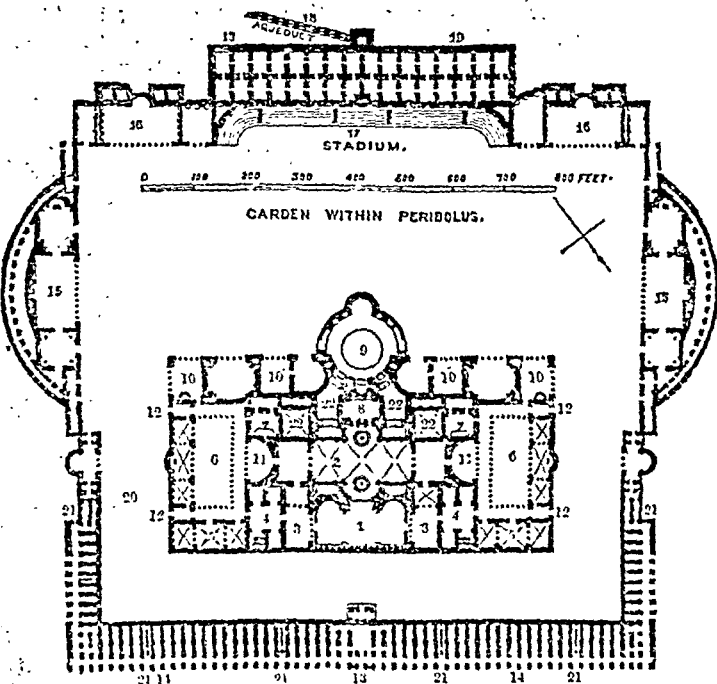
Ill. 70 Baths of Caracalla, plans. *After Anderson and Spiers*, The
Architecture of Greece and Rome (1937)

REFERENCES

1. Frigidarium.
2. Tepidarium.
3. Halls.
4. Apodyterium.
5. Ditto.
6. Peristyle Halls.
7. Hot Baths.
8. Antechamber
   or Laconicum.
9. Caldarium.
10. Special Baths for Athletes.
11. Hemicycles.
12. Entrance to Baths.
13. Principal Entrance of the
    Thermae.
14. Private Baths.
15. Lecture Rooms, Libraries,
    and Porticoes for Prome-
    nading.
16. Palestrae.
17. The Stadium.
18. The Marcian Aqueduct.
19. Reservoirs.
20. Ancient House discovered
    on Site.
21. Staircases to Private Baths.
22. Internal Courts.

mythology, must have produced an effect of unparalleled
splendor. Decoration was applied, but not entirely as a ve-
neer, as structural columns and entablatures were securely
built into the walls.

The *thermae*, or bathing establishments, were more than

baths; they were places for recreation. A Roman of the Empire could spend a day at one of several of the major thermae to attend lectures, play games, meet friends, or take a Turkish (sweat) bath, if he did not care for the more common ways of bathing, which were also available.

Basilica of Maxentius (306–312 A.D.) and Emperor Constantine (316–337 A.D.). This building was begun by Maxentius, the rival of Constantine, but was completed by the latter, to become the first vaulted and fireproof basilica. In Roman times, basilicas served as law courts and places of business. The design repeated on a larger scale (325 feet by 85 feet) the Tepidarium halls of the thermae. Three groin vaults, originally 117 feet high, flanked by barrel-vaulted aisles, stand to this day. The decoration must have been in the style of the thermae. The monumental ruins were greatly admired by later architects and furnished inspiration for the building of the Church of St. Peter's.

The Colosseum. The Colosseum, the best-known ruin of the Empire, still retains much of its original appearance (Ill. 71). An amphitheater seating from 40,000 to 50,000 people, it was oval-shaped in plan, with four tiers of stone seats supported by stone piers and concrete vaults rising from the arena where the bloody gladiatorial combats took place. The network of cells, dens for wild animals, and underground passages are now visible. Though the Colos-
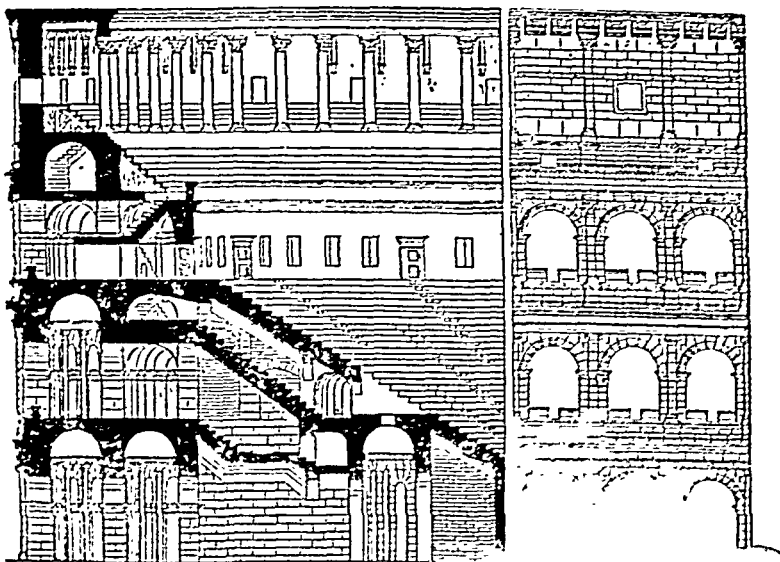
Ill. 71 Colosseum, Rome, cutaway view and façad

seum was for centuries used as a convenient source for building materials, a portion of the exterior travertine façade is left to show how the Roman orders, Doric, Ionic, Corinthian, were superimposed in three stories as engaged columns. Each order had a complete entablature and enclosed a round arch; in the Colosseum, the arched openings led to vaulted aisles and stairs. This scheme became so common that it received the name of the Roman arch order and became a part of the Western architectural tradition.

Triumphal arches and columns were another Roman contribution to Western architecture. Of the many arches which existed in Rome, the Arch of Titus (71–82 A.D.), the Arch of Septimus Severus in the Roman forum, and the Arch of Constantine near the Colosseum are still standing in good condition. Of these, the Arch of Titus is the simplest and best proportioned. The triumphal column of Trajan in Trajan's forum is of colossal size (140 feet high). It has a spiral band of reliefs winding around the shaft representing the Dacian (Rumanian) campaigns.

Roman temples were for statues of the gods, but they might also house statues of famous generals (*Mars Ultor*). They were not intended for congregations, and sometimes even functioned as public treasuries (*Temple of Saturn*) or as offices for weights and measures (*Temple of Castor and Pollux*). The finest of all, the *Temple of Venus and Roma*, was barrel-vaulted and had columns on all sides. The best-preserved temple, the *Maison Carrée*, is at Nimes in southern France; it is raised on a platform, with a deep porch in the Etruscan manner and freestanding columns engaged on the sides. The *Maison Carrée* is as well proportioned as any Greek temple; it was admired by Thomas Jefferson and is thus related to the Classic Revival in the United States.

Roman architecture developed variations in Syria. At Palmyra streets were lined with porticoes of Corinthian columns. *The Great Temple of the Sun* at Baalbec, with its entrance portico, court, and great quadrangle, covered as much ground as the whole forum of Trajan. Under Greek influence, carving in Syria took on a flat surfacelike character.

Architectural Decoration. The Romans elaborated the Corinthian order: moldings were carved, the entablature was enriched with carved brackets called modillions and with rectangular blocks called dentils placed underneath the cornice (Fig. 43). The bell-shaped Corinthian capital was filled in with scrolls and foliage completely concealing the background. The Romans also added Ionic scrolls to the Corinthian capital above the rows of leaves, creating the "composite" capital. A heavily foliated scroll, carved in a continuous band for friezes and pilasters, was enriched with tendrils

and rosettes. Figures, grotesques. griffins. vases. and masks were often combined with acanthus leaves, and festoons and eagles were used. These decorations were carved on marble and molded in stucco. Such stucco reliefs used on ceilings are among the most attractive creations of Roman art. A whole new category of ornamentation, varied and inventive. was created; it later furnished inspiration to Renaissance and modern art. The most common examples are the Roman architectural moldings (Ill. 72).

Reliefs. Pictorial reliefs were developed in Hellenistic centers, as in Alexandria, and continued during the period of the Empire. These reliefs are virtually pictures in stone, and were used for interior decoration of houses and public buildings. A scene from daily life, *A Peasant Driving a Cow* (Fig. 44) of the Augustan period (M. Bieber), is carved in high relief in the foreground and low relief in the background. The historical reliefs made for the *Altar of Peace (Ara Pacis)* in Rome represent official Roman state art. The altar was commissioned to commemorate the return of Augustus after he had "pacified Spain and Gaul." The carved panels represent the imperial family advancing toward the sacrificial scene held once a year in honor of the goddess of peace. Figures heavily robed in togas crowd the space to suggest figures standing in front of others that fade into the background (Florence, Uffizi). This suggestion of several planes in the relief to indicate depth, a Roman innovation, has been called "illusionism" (Franz Wickhoff). The heads are believed to be portraits; the figure with the toga slung over his head is Augustus. as high priest (Pontifex Maximus); he is followed by a child (Lucius) and Livia, his third wife. Realism did not extend to the children, who were made to look like miniature adults.

In the less formal design of another large relief (Fig. 45) from the *Ara Pacis,* the children on the lap of Mother Earth (Tellus) are like little chubby cupids. Behind her, a seated figure personifies water, another in front of her personifies air; together with fruits and vegetation, the group symbolizes nature's abundance. The carving of *Tellus* is in the tradition of the Parthenon pedimental figures: the two subordinated figures on a slightly smaller scale are a bit lifeless compared to the fine relaxation of the main group. The illusionist style was continued in the reliefs from the Arch of Titus, which was erected to commemorate the Palestinian campaign of 71 A.D. In one of the two reliefs, the table of the shewbreads and the seven-branched candlesti͏   ͏orp͏ are represented as being carried from the Ten͏

OVOLO.

OGEE,
OR
CYMA-
RECTA.

CYMA-REVERSA.

CAVETTO.

TORUS.
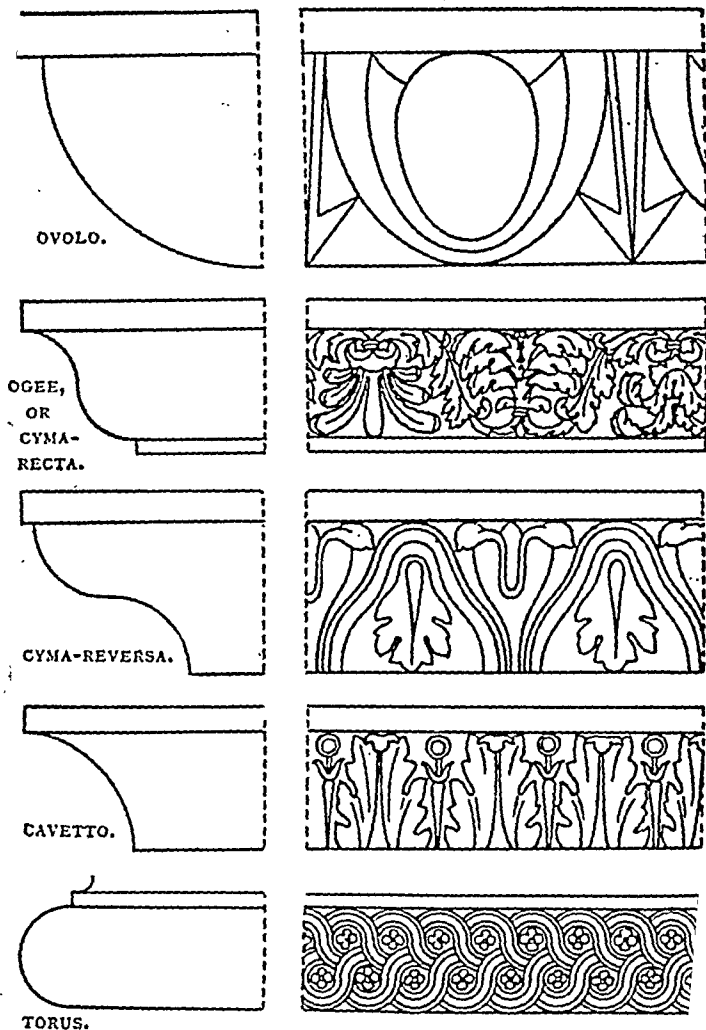
Ill. 72 Roman moldings and their ornamentation. *After G.* 1
Rhead (1905)

the Roman house wax masks (*imagines*) of the ancestors (
couraged a literal style in portrait sculpture (Fig. 47). T
style was supported by the realistic tradition of Etrus(

art. A realistic trend based on imitation of wax death masks was tempered by Greek idealism. The *Augustus of Prima Porta* (Vatican) shows an idealized Doryphoros-like pose. Barefooted and bareheaded, he stands with one foot advanced and with one arm raised, as if addressing his army. He wears an elaborately decorated cuirass. The miniature *Amor* on a dolphin at his feet is symbolic of Aphrodite, the goddess of love, to whom the imperial dynasty traced its origin. A portrait statue of a *Roman Lady* (Capitoline Museum) reclining in an armchair (Ill. 73) combines an easy, natural pose with a calm, contemplative dignity. The Hellenistic style shown in this statue was popular with Hadrian and his successors. *The Bronze Equestrian Statue of Marcus Aurelius,* restored and without its original base, now stands in Rome on the Square of the Capitol (Piazza del Campidoglio). Aurelius is seated on a massive horse with his arms outstretched, a gesture which has been interpreted, perhaps wrongly, as one of benevolence, a posture appropriate for
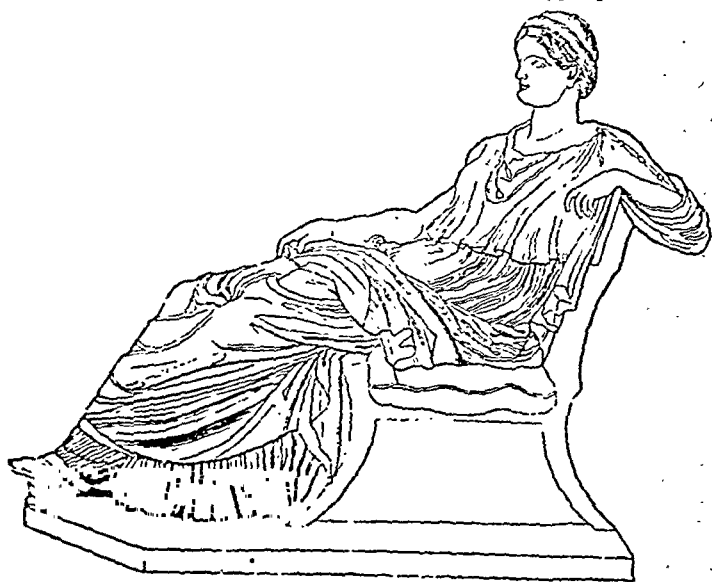
Ill. 73 Seated Roman lady, Capitoline Museum. *After Lübke*

the Stoic philosopher and author of the well-known *Meditations*. This work, ancestor to numerous equestrian statues of later periods, owes its preservation during the Middle Ages to the fact that it was believed to represent Constantine, the first Christian emperor.

The production of statues, heads, and busts of emperors and prominent citizens was an industry for which we have

no close modern parallel. Every Roman of prominence was expected to have an image of the emperor in his house. Busts of women were made to provide movable hair, so as to be able to keep up with the changes of fashion. Statues without heads were turned out in quantity; trained artists were then commissioned to supply the individual heads. It became the fashion to have oneself represented as a god, for example as Apollo or Venus. Busts of gladiators and courtesans were placed in temples; those of scholars and playwrights, in public libraries and market places.

The wax mask favored a stark but lifeless realism (Fig. 47). Greek Hellenistic influence produced restrained but more lifelike portraits (Ill. 74), and the late period of the third century produced stylized heads which had large eyes with carved irises and hollowed-out pupils (Fig. 48).

Ill. 74 Agrippa, Louvre.
After Baumeister

Painting and Mosaics. What has been preserved in this field does not lack variety; portraits, figures, landscape, and still life are represented in subjects from mythology, the theater, and everyday life. This includes fresco wall decorations, paintings on marble panels, as well as wood panels of mummy cases found in quantities in Egypt. Mosaics were also used pictorially to suggest realistic paintings, using small tesserae in many colors (*opus vermiculatum*) to suggest gradations of form. The most famous is *The Battle of Alexander and Darius* (Fig. 49). It was probably imported from Alexandria or the Aegean Islands and laid as a pavement in Pompeii, in the House of the Faun.

The Pompeiian frescoes give a comprehensive impression of wall decoration as it had developed in four styles up to the year 79 A.D. The final stage is delicate and graceful, at times fantastic or seminaturalistic. Large background areas are painted in flat tones, chiefly vermilion, black, blue, and green. This "Pompeiian style" has influenced later periods in art, particularly in the United States.

The style of painting, to differentiate painted panels from architectural, shows an easy command of figure drawing, light and shade and a slight use of cast shadows. Depth is suggested by receding lines which simulate perspective, but are not scientifically correct. The walls seemingly open up through painted windows, through which one sees open courts and fanciful architectural structures of an open and

airy appearance. The paintings are themselves set in panels within the painted decoration, which covers the entire wall. These panels are now in the Naples Museum, in Pompeii itself, and in Rome. The emphasis is on the figures; we should call the style decorative. As the technique is fresco, it could hardly be expected to attain the full visual effect of consistent illumination, which was only made possible after the introduction of oil painting. A well-known work is the *Aldobrandini Marriage,* named after its first owner, Cardinal Aldobrandini (Fig. 50). Discovered around 1605, it has long been admired and copied by such artists as Rubens, Van Dyck, and Poussin.

The individual heads from the Egyptian mummy cases came from a colony of Greeks in lower Egypt (Fayum). The technique is impressionistic in the thick surface of paint. The pigments were mixed with wax and set by passing a hot iron over the painting. In this encaustic wax process the heads are broadly modeled in light and shade, have large dark expressive eyes, and appear to be portraits of individuals (Fig. 52).

Conclusion. Roman art has achievements in its own right, independent of its Greek heritage. Four centuries of comparatively peaceful development had led to great wealth in the hands of a few. This concentration of power, based on slave labor, made possible an unprecedented artistic development. No modern city compares architecturally with the magnificence of imperial Rome.

The decline of the Empire is revealed in what happened to the city of Rome and the surrounding *campagna.* Deterioration set in by the fourth century; the barbarian invasions only contributed to the total destruction, which was largely brought on by the Romans themselves. The temples were neglected after the introduction of Christianity; columns and capitals were removed individually as needed in Christian basilicas. Marble of every kind, including much sculpture, was burned in the lime kilns merely to provide raw materials for new construction. Practically every pagan public building was converted; the Colosseum bristled with churches before it was finally ruined in an earthquake in the fourteenth century. Even so, an individual building like the Temple of Concord was not destroyed until the Renaissance. Eventually Rome was reduced to the status of a provincial town of 20,-000 inhabitants. In the once proud Roman forum, where senators and emperors had settled the affairs of the world, cattle grazed among the ruins.

Early Christian
and Byzantine Art:
100 A.D. - 1453 A.D.

Historical Background. As Christianity spread through Europe
in the centuries after Constantine, the classic art of antiquity
became the Christian art of the Middle Ages. The Church
inherited the classical civilization and gave art a Christian
content, but changed the style only very gradually. The
millennium between 300 and 1300, between the disintegra-
tion of Roman art and the culmination of the Gothic, is the
period of medieval art. The new styles, which grew up be-
yond the Alps as well as in Italy, reflected the integration of
these more primitive people into the advanced culture of
ome. A result of this contact of the still undeveloped Teu-
tonic culture with classic civilization was the so-called
"Carolingian Renaissance" of Charlemagne (771–814), who
temporarily united the various Frankish tribes under one
ruler. The beginning of the Romanesque style after 1000
A.D., some 700 years after Constantine, in countries which
had once been Roman provinces, brought the newly emerging
nations of France, Germany, and Britain into the forefront
of Western art. The intervening period is in the nature of a
bridge from Roman to Romanesque art rather than a void be-
tween periods, though the centuries between 500 and 800 are
commonly referred to as the Dark Ages. Even so, this slow-
ing down of cultural development was not so much of a break
in tradition as the period that separated Mycenaean from
classical Greek art.

Though all medieval art is Christian, the term Early
Christian is applied to the early centuries, particularly the
period in Rome and Italy from 300 to 800. Byzantine art
is the Christian art of the Near East. After the death of

Emperor Theodosius, the Roman world was divided into a western and an eastern empire (395 A.D.); in 476 A.D. the western (Italy) came to an end, but the eastern continued until it was overthrown by the Turks in 1453. In 330 A.D. Constantine renamed Byzantium "Constantinople" and made it his capital; this city was the great cultural and artistic center of Christianity up to the time of the Renaissance. Byzantine art grew out of the same background as Early Christian art, and at times can hardly be separated from it. The contributions absorbed from the eastern provinces of the Empire, fused with a classic heritage, eventually gave Byzantine art an individuality of its own.

The Art of the Catacombs. Christianity became the state religion (313 A.D.); the ancient gods no longer satisfied the religious needs of the age. The Christian emphasis on the immaterial world of the spirit gave art a new meaning, but not a new style. This is evident in the painted decorations of the Christian subterranean burial places, or catacombs, of Rome. Catacombs occur elsewhere, but those in Rome are the most famous. The use of such underground galleries, some 550 miles of cemeteries barely a yard wide cut out of the tufa along the highways, was not peculiar to the Christians, but an oriental custom. Concealment was not their purpose; the plots were reserved for burials and served as places of refuge only during periods of persecution. Shafts opening up to the surface provided some light, though lamps were used. Catacomb burials declined after Constantine and ceased during the first quarter of the fifth century.

The style of the early fresco decorations of the first half of the second century is in the manner of the fourth style of Pompeian wall decoration. These architectural decorations, for the most part painted ceilings, continued with variations of style during the centuries before Constantine.

As the Christians were interested in the soul's salvation after death, they were not disposed to introduce into their tomb paintings that fullness of life represented by classical art. Considering the poor illumination and the fact that these paintings were rarely seen, almost any picture that conveyed the idea might have been deemed acceptable. As paintings were looked upon as visual prayers rather than as works of art, they could be sketchy. We need not assume that the early Christians were always poor people who had to be satisfied with mediocre paintings, or that the style of the catacomb paintings reflects a general decline of Roman painting. Certain stories from the Old and New Testaments that were developed during later periods are present in a simplified form in the catacomb paintings. A painted fresco   other

and child motif suggests the involved compositon of Raphael's *Madonna of the Chair*.

We may use the catacomb of *S. Lucina* as an example of the Christian modification of Pompeian decoration. We must look to the corner figures representing a beardless young man carrying a lamb on his shoulders (Ill. 75) and a woman
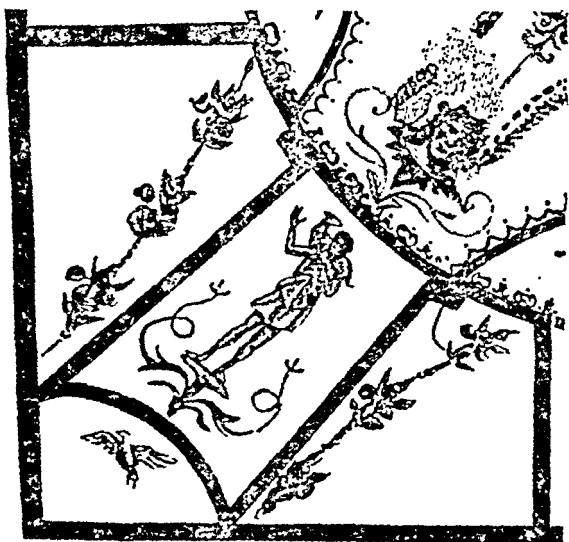
Ill. 75   Ceiling painting, catacomb of S. Lucina, Rome, detail. *After Springer (1898)*

with uplifted arms. The former is the symbol of the good shepherd of the Twenty-third Psalm, who leads his sheep "through the valley of the shadow of death," and the shepherd of the parable (Luke 15:4-6), who finds the lost sheep and "layeth it on his shoulders, rejoicing," and Christ Himself, the "good shepherd" who "giveth his life for the sheep." The female figure is the symbol of the soul. Her uplifted hands represent the Biblical expression for the attitude of prayer, called orant by archaeologists. This attitude was used in one of the early relief carvings of the crucifixion on the doors of Santa Sabina in Rome (c. 432 A.D.). A realistic representation was avoided, as this form of punishment, reserved for criminals, was popularly held to be shameful. The ridicule to which the early Christians were subjected is illustrated by a drawing (second century) substituting an ass's head in the crucifixion, inscribed "Alexaminos adores his God."
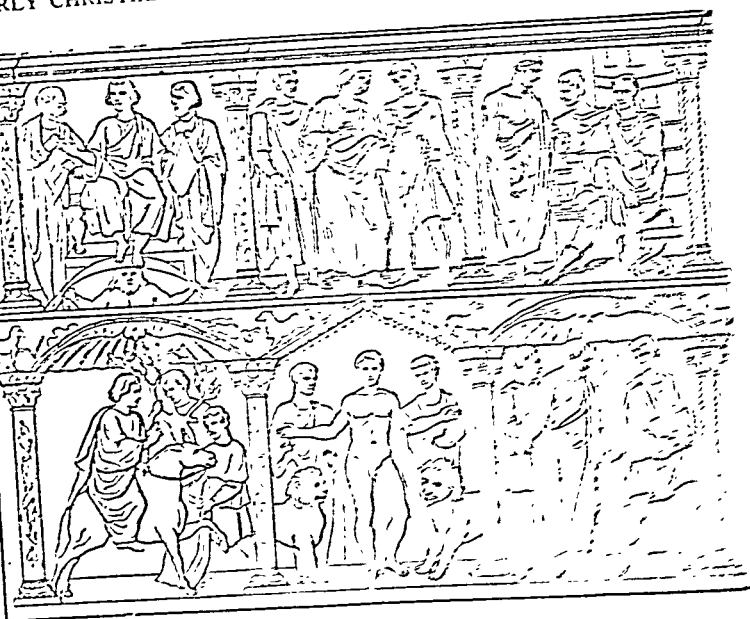
Ill. 76 Sarcophagus of Junius Bassus. Vatican Grotto Cave

Catacomb paintings do not represent events fully and in all details; they refer to stories that were well known and could be reduced to a figure or two or to an emblem. The ship symbolized Christ (Ill. 77), the anchor hope, the dove stood for the soul and, being a bird, follows familiar symbolism used before the Christian era. Other symbols were the palm branch for victory, the grapes the for Christ and the peacock for immortality. These are a few of the many symbols common to early Christian and later medieval iconography.

Symbols appear in their typical form and in decorative and bronze lamps and on glass, which had become plentiful by the fourth century. The bottoms of the smaller gold glass plates found in the catacombs show Christian figures engraved in a film of gold, protected by a layer of glass. A married couple (Ill. 79) appears in a center medallion with the words of a toast "Drink! Live!" These were probably household dishes, the bottoms of which were afterwards set into the stucco as memorials or for identification. The figures are posed to illustrate a particular miracle or scene: the raising of Lazarus, Adam and Eve, the sacrifice of Isaac. Subjects like these were commonly used and have been related to later funeral liturgies that deal with Biblical descriptions of divine deliverance from death. The thought seems to be

that almighty God, who had wrought miracles, could also be relied on to deliver the soul from death.

Sculpture. After catacomb burials declined, elaborately carved marble sarcophagi were used for wealthy Christians, not only in Italy, but also in France, Spain, and other countries. Some 500 have been preserved in Rome, around 300 in France. Several styles used in cosmopolitan Rome are believed

Ill. 77 (*upper left*) A ship. engraved gem. *After Brit-ish Museum Guide (1921)*
Ill. 78 (*upper right*) Anchor, fish and dove, engraved gem. *After British Museum Guide (1921)*

to have been introduced from eastern centers like Alexandria, Antioch, and others in Asia Minor. The carving itself was most likely executed in Roman shops, as in the sarcophagus used for Junius Bassus, a Roman consul (d. 359 A.D.). The carved front shows two rows of five niches each; in our illustration (Ill. 76) only the central niche and the two on the right side of the center are included. In the upper left niche, a beardless Christ hands the Gospel to St. Peter or St. Paul in the so-called *traditio legis*. Representing an advanced stage of sculptural development, the carving is elaborate and conveys the meaning of each episode.

A type of sarcophagus more in the Eastern spirit of Byzantine art was made in Ravenna during the fifth century, as in that of St. Theodore (Fig. 53). Monograms of Christ within wreaths are carved as ornamental reliefs on the rounded lid, and on the front are symbolic peacocks and grapevines. The two monograms in the center of lid and front are formed by the first two letters of the Greek word for Christ, the *chi* and *rho* (*ch* and *r*). The alpha and omega, first and last letters of the Greek alphabet, to the expression "I am Alpha and Omega, the beginning and the ending, said the Lord . . ." (Rev. 1:8-11; *see also,* Rev. 21:6; 22:13). The monogram within a wreath was the imperial emblem the Em-
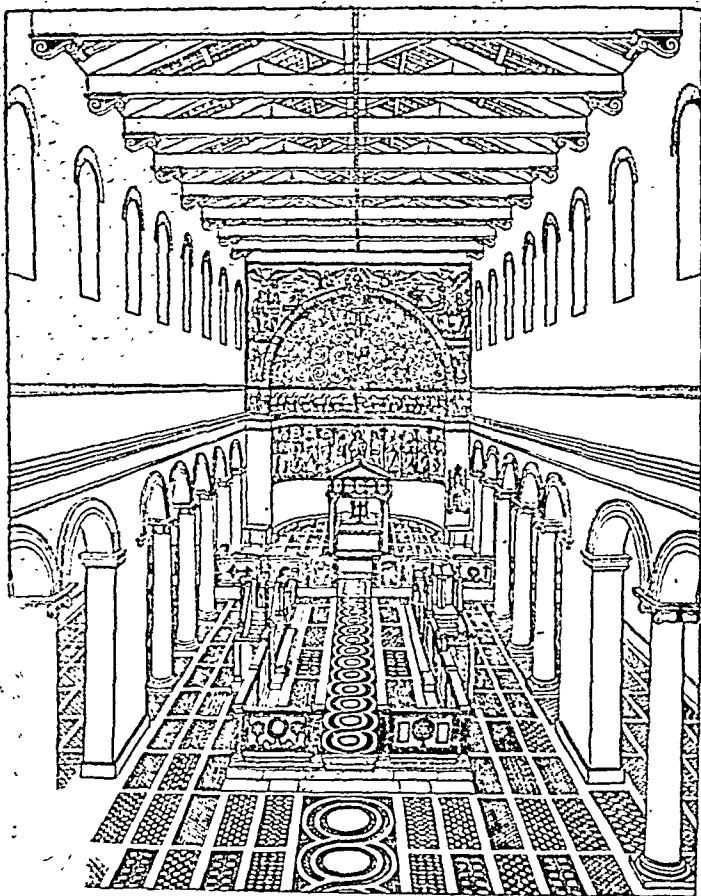
Ill. 80 San Clemente, nave, Rome. *After Springer (1898)*

The large monumental hall of the law courts with its
semicircular apse is repeated in the plan of the religious
basilica; the atrium of the Roman house is repeated in the
atrium of the basilica, a forecourt with a central fountain
for Baptism. The early churches built by Constantine were
rectangular halls in which a central nave (*navis*, ship) was
separated by colonnades from side aisles. The *basilica of
San Clemente* in Rome still shows the original interior ar-
rangement (Ill. 80). The high nave walls resting on the
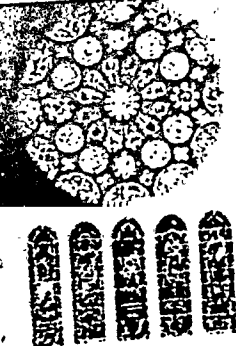
Fig. 89 Cathedral of Chartres, rose window, nave. *Courtesy French Government Tourist Office*
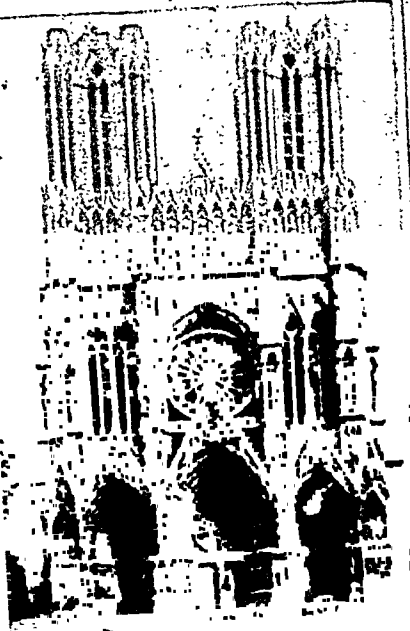
Fig. 90 Cathedral of Rheims, west facade. *Courtesy French Government Tourist Office*

Fig. 91 Cathedral of Amiens, nave. *Clarence Ward*

Fig. 92 Cathedral of Amiens, vault of choir. *Clarence Ward*

Fig. 97 King's College Chapel, Cambridge. *Marburg*

Fig. 98 Gloucester Cathedral, cloisters, fan vaults. *Courtesy Judges Ltd., Hastings, England*

Fig. 99 Henry VII Chapel, Westminster Abbey. *Courtesy British Information Services*
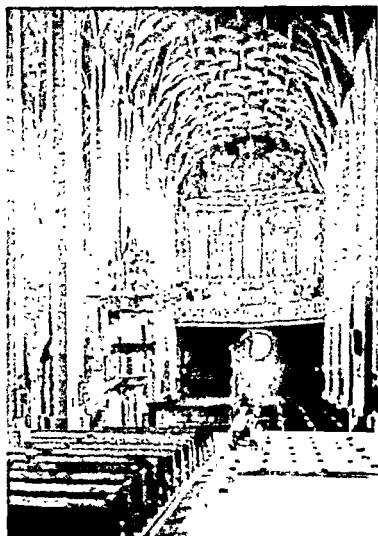
Fig. 100 Cathedral of Halle, nave. *Stoedtner*

colonnades had clerestory windows above the side aisles. A semicircular vaulted apse at one end with a marble bench provided seats for the clergy, with a chair or throne in the center for the bishop. As the clergy came to require more space, a slightly projecting transept (bema) was added. The altar in front of the apse was placed over the tomb of the martyr to whom the basilica was dedicated. The tomb itself was in a crypt on a lower level. Four columns supported a marble canopy (ciborium or baldachino) over the altar. Space in front of the altar, reserved for the officiating clergy, was enclosed by a marble railing. Two pulpits (ambones) on the sides completed the built-in church furniture, all of marble and enhanced by colored marble mosaic.

The total interior effect is well illustrated in the *basilica of St. Paul (San Paolo fuori le mura)*. It was built by Theodosius in 386, but was destroyed by fire in 1823. In its restored condition, it is one of the most impressive churches in Rome. Unlike the classic temple, the Christian basilica developed the interior and left the exterior unadorned. The colonnades, diminishing in perspective, concentrated attention on the altar; the nave arcade shows Corinthian columns supporting arches in the late Roman manner rather than horizontal architraves. The space above the colonnade and below the clerestory, the triforium, was reserved for colored mosaics, as well as the space above the triumphal arch which terminated the nave. The open timber ceiling showing the trussed roof construction was at times enclosed by an ornate ceiling. The effect was one of colored surface and airy spaciousness varied through the views that unfold through the openings of the colonnades, one behind the other in the five-aisled basilica. Such an expansion of view was well suited to the spirit of the Christian religion, which addressed itself to all people everywhere and also focused on heaven and eternity (Ill. 81).

From the point of view of structure, a lightly constructed hall with a wooden roof was no rival of the groin-vaulted basilica which Constantine completed. The more laborious and more expensive vaulted construction was avoided, probably because new structures were in immediate demand. Constantine himself built two large and splendid basilicas in Rome: St. Peter's, which is no longer standing, and St. John Lateran which has been so altered as to be unrecognizable. Constantine's basilicas were built of new materials, but later basilicas made use of materials taken from pagan buildings *(San Lorenzo fuori le mura)*. Eventually basilicas and subsequent churches were oriented to face the west, the apse being at the east in the direction of Palestine.
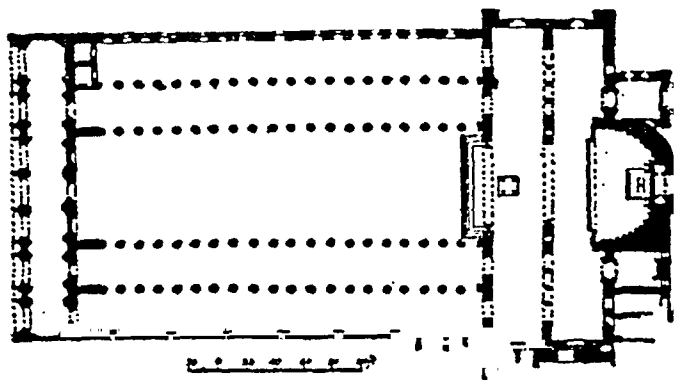
Ill. 81 S. Paolo fuori le mura, plan, Rome.

Mosaics. The apse of the basilica became the favored place for mosaic decoration. Christ, bearded following the Eastern (Syrian) custom and surrounded by his disciples, appears seated in the manner of an emperor on a throne in the apse of the fourth century *church of Santa Pudenziana* in Rome (Ill. 82). The background shows buildings which no longer exist; the empty cross is a symbol of death and sacrifice; the whole scene was meant to suggest heavenly Jerusalem. Two women with wreaths may be allegories of the Christian church and the Jewish synagogue or they may be the daughters of Pudens, who donated the church. The symbols of the evangelists from Revelation appear in the sky as winged half-figures: Matthew as angel, Mark as lion, Luke as ox, and John as eagle. This is believed to be the earliest appearance of these symbols in art. The background suggests space, the draped figures, rounded form; the style is pictorial, reminiscent of classic art. Even though the mosaics have been altered and restored, the general effect is probably original. Since mosaics received their most elaborate development in Byzantine art, we shall return to them in connection with that style.

The Byzantine Style. Byzantine art was controlled by religion more rigidly and for a longer period than any subsequent style in the history of Western art. The Church determined the subjects and prescribed rules as to how they were to be given visual expression. The unreal and visionary character of Byzantine art at its best was due to the influence of the Church, whereas the splendor and refinement directed its appeal to the cultivated tastes of court and nobility.

Until fairly recently, critics of Byzantine art looked upon it as lifeless and static, not unlike Egyptian art. Both styles have in common duration and inflexibility—in both cases more apparent than real—based on a belief in immortality. To change the style of works of art that were considered sacred would have seemed impious. Such feelings encouraged a conservative spirit and a disinclination to experiment. Art was limited in its capacity to suggest the spiritual; dematerialization could go only so far, particularly as the human figure and occasional motifs from both nature and the man-made world had to be introduced to tell the story of the Gospel. Lofty domes encrusted with mosaics of sacred images on a gold ground represented ultimate achievements. Also, since Byzantine art included all countries of the eastern Mediterranean and used different materials and techniques, some variations were unavoidable. External conditions of the Empire hardly affected the style, but only provided greater wealth for the enrichment of art. The individual styles of great artists made themselves felt in artistic quality rather than in easily recognizable differences. Names of painters are known from the late period, when signatures appeared. In the last period, the stories of the Gospel were interpreted realistically; a change of the religious spirit vivified content, but did not greatly change style (D. Talbot Rice). In the course of a long history even a religious art did not remain static.

Origins. Of the several elements that fused in the formation of Byzantine art, a Hellenistic trend can be differentiated
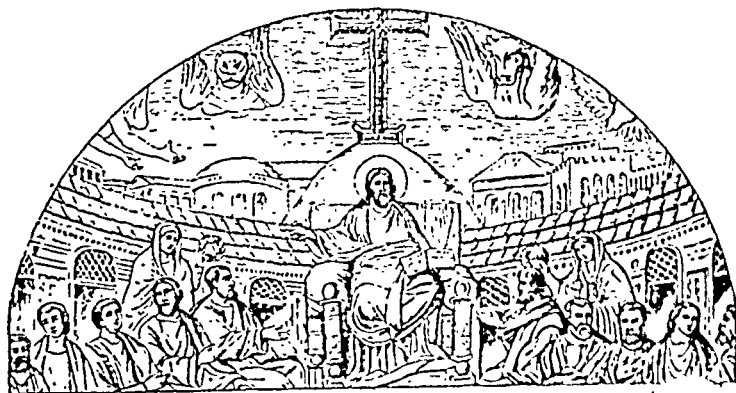
Ill. 82 Christ enthroned in the New Jerusalem, mosaic, S' ziana, Rome. *After Springer (1898)*

or the shape of a Greek cross. The church on a central plan prevailed during the second Golden Age, and produced many small stone churches like the *Little Metropolis Church* at Athens (*c.* 1150), which measures only 25 by 38 feet. Some highly original churches carried the stone into the roof tiles over the central dome, which was raised to appear externally as a low tower (Akthamar). All emphasize the vertical axis around a central dome, as at Hagia Sophia. In the Greek cross plan, each of the four arms of the cross has a lower dome of its own not externally visible in small churches. The plan of the Church of the Holy Apostles in Constantinople was imitated in the churches of St. Mark's (1063–1071) in Venice and St. Front at Periguex (1120) in southern France.

Byzantine architecture received its most monumental expression in Constantinople in the Hagia Sophia founded by Constantine, wholly reconstructed by Justinian in 532, and dedicated with impressive ceremonies in 537. Anthemius of Thralles and Isidorus of Miletus were the architects. Architecturally its dome on a square plan (Ill. 83 and 84) marks an advance over the Pantheon dome on a circular plan. The lightly constructed dome rests on four massive piers (Ill. 83) carried across the vaulted aisles on arches. The piers or buttresses and arches are shown in the section (Ill. 83), and the arches appear on the interior as well as on the exterior
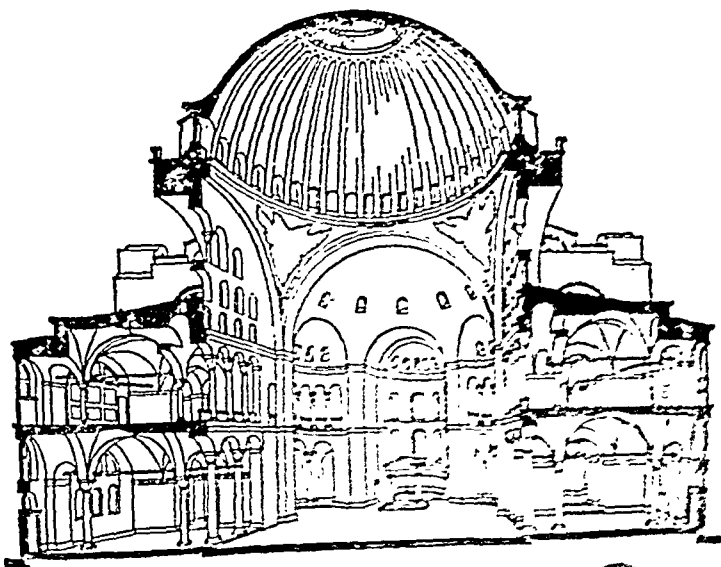
Ill. 83 Hagia Sophia. section, Istanbul. After Simson (?)
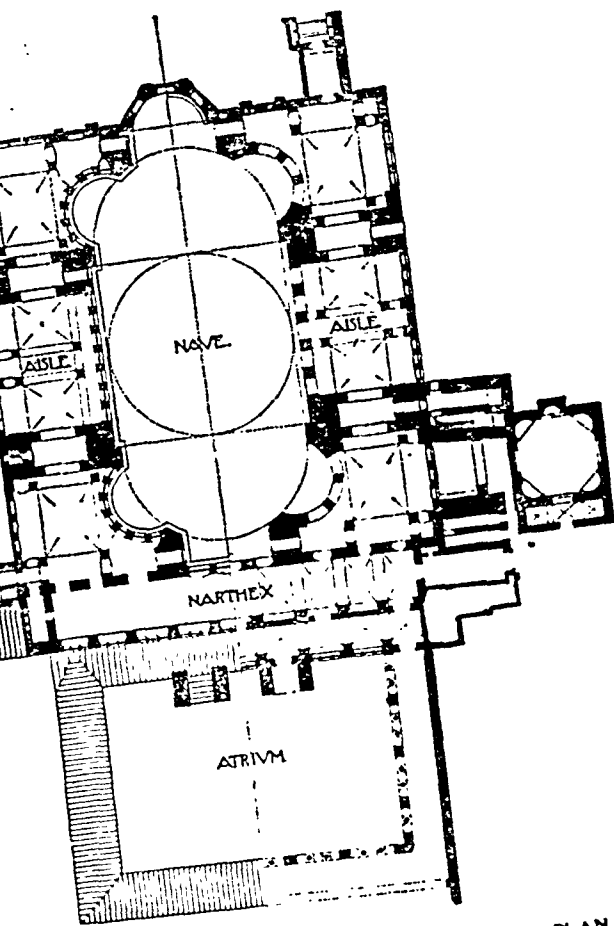
HALF FIRST FLOOR PLAN.   HALF GROVND FLOOR PLAN.

10 0 20 40 60 80 100   150   200
SCALE   OF FEET.

Ill. 84 Hagia Sophia, plan. Istanbul. *After Simpson* (1929)

(Fig. 54). The transition from the circular base of the dom to the square plan is accomplished by spherical triangl called pendentives. They carry the curved surface of the l than semicircular dome to the points from which the arcl spring. The exterior is left undecorated, though slender tow
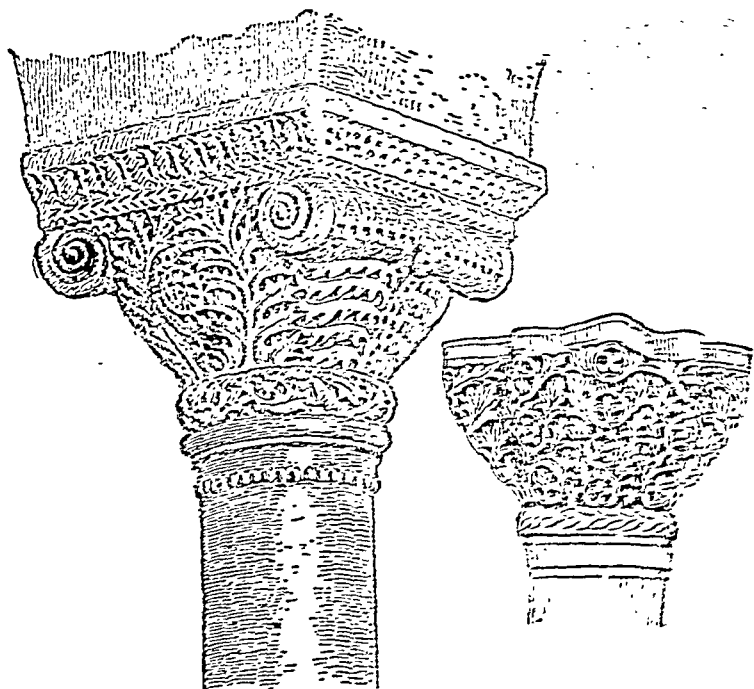
Ill. 85 Capital. Hagia So-
phia, Istanbul. *After Moore*

Ill. 86 Capital. San Vitale, Ra-
venna. *After Simpson (1929)*

(minarets) built by the Turks improve the effect. The interior
was sumptuously decorated with veined marble slabs and
glass mosaics above the ground story

Monolithic columns from classic buildings were imported;
columns of dark green variegated (*vert antique*) marble were
used in the nave arcade, columns of Egyptian porphyry, in
the niches. The Roman entablature with its projecting mem-
bers and heavily carved moldings developed into flat bands.
Arches rise directly from a basket-shaped capital; a delicate
pattern of shallow, crisp carving, suggesting acanthus and
floral motifs, covers the surface of the capital and stands
out, light against dark (Ill. 85 and 86). This style of Byzan-
tine carving recalls a type of lace-like surface carving in
Syria, as in a section of a frieze from Mschatta (Berlin Mu-
seum), where this section formed part of a now ruined palace
wall (fourth to seventh century). Windows in the side walls
and at the base of the dome furnish illumination, and a varied
grouping of columns, arches, and niches produce a contrast
of light and deep shadow.

A feeling of spaciousness is aided by the progression of color from the darker colors in the marble at the lower level to the richness of the gold-covered vaults above. Even so, the interior height of the dome (180 feet) is exceeded by the later domes of St. Peter (Rome) and St. Paul's (London). In Hagia Sophia, the whole interior in its majestic simplicity is apparent at a glance. The height of the columns above and below the level of the gallery is kept to a modest scale. This adds to the impression of height, climaxed by the huge arches, over which the dome flows in a gentle curvature to unify the effect. The grandeur of this interior has never been equaled; it overwhelms the individual, making him feel small and insignificant.

Paul the Silentiary, a court official and a member of the literary circle of Emperor Justinian, recited a descriptive ode on Hagia Sophia, probably within the church itself as part of the opening ceremony. It translates the ideas of the architect into the language of the poet. Here are a few selected passages: *Atrium:* "Everywhere the walls glitter with wondrous designs. . . . The marbles are cut and joined like painted patterns . . ."; *Carved Spandrils:* ". . . the mason weaving together with skill thin slabs of marble, has figured on the flat surface of the walls intertwining curves laden with plenteous fruit, and curved pattern of a winding chain of clusters . . . until it overshadows all the stone near with ripples like beauteous tresses . . ."; *Capitals:* "And the lofty crest of every column, beneath the marble abacus, is covered with many a supple curve of waving acanthus—a wandering chain of barbed points all golden, full of grace . . ."; *Mosaic:* "Now the vaulting is formed of many little squares of gold cemented together. And the golden stream of glittering rays pours down and strikes the eyes of men, so that they can scarcely bear to look. One might say that one gazed upon the midday sun in spring, what time he glides each mountain height . . ."; *Altar:* "And on columns of gold is raised the all gold slab of the holy table, standing on gold foundations, and bright with the glitter of different stones . . ."; *Lighting:* "No words can describe the light at nighttime: one might say in truth that some midnight sun illumined the glories of the temple . . . long twisted chains of beaten brass come together as they fall towards the ground . . . and finish in unison on a circle. And beneath each chain he has fitted silver discs, hanging circlewise in the air . . . these discs, pendent from their lofty courses, form a coronet above the heads of men . . . pierced by skillful workmen that they may receive shafts of fire-wrought glass and hold light on high for men at night. . . . And whoever gazes on the lighted trees with their crown of circles feels his heart warmed with joy . . . all care vanishes

from the mind . . . the whole heaven, scattered with glitter-
ing stars, opens before them, while the night seems to smile
on their way."

Iconography. As the representative arts expanded in mo-
saics, mural painting, book illustration, ivories, and enamels,
certain prescribed types were adhered to for Christ, the Vir-
gin, angels, prophets, apostles, and evangelists. The earlier
classic representation of Christ, youthful and beardless, was
replaced by a more aged type with long hair, black beard,
and yellowish skin. This grave and solemn Christ was meant
as a realistic representation of a man typical of Palestine.
After the Council of Ephesus (431 A.D.) had proclaimed the
Virgin Mary mother of God (*Theodokos*), she was repre-
sented in art between the sixth and twelfth centuries with an
oval face and a serious expression. Several attitudes were used:
(1) standing, holding the Child in her left arm, her right held
out in prayer, known as *The Hodegetria* (she who points the
way); (2) standing, holding the Child close, *The Kyriotissa*
(mistress); (3) bust length, arms raised as an orant, *The
Blachernitissa* (named after a church in Constantinople);
(4) standing as an orant without Child; (5) seated on a throne,
holding the Child on her knees or blessing (Fig. 55); (6) nurs-
ing the Child. These types were repeated without change. A
long white beard and bald head became standard for St.
Paul, a short beard defined St. Peter; long curly hair and
black beard, St. John the Baptist; archangels took on the
elaborate armor of Roman emperors. Blue and cherry-red
were used for Christ, at times combined with gold; blue and
claret-red for St. Paul, yellow and light blue for St. Peter,
and blue for the Virgin. By the sixth century, the representa-
tions of the Annunciation, the Adoration of the Magi, the
Baptism, the Ascension, and other stories from the Gospels
had received their definitive form in the mosaics of the
sanctuaries of Palestine. Through the influence of the pil-
grims who visited the Holy Land from the West, the topics
represented in Palestine were accepted for Christian art every-
where.

Mosaics. Color, the use of gold grounds, luminosity, and
flatness are characteristic of mosaics. The surface of wall
mosaics is slightly uneven, depending on how each colored
glass or mother-of-pearl tessera is imbedded in the mortar.
With colors ranging from light to dark, variations in the re-
flection of light produce a glitter, increased in the curved
surfaces of apses and domes, which accounts for the luminous
quality of mosaics. Mural paintings, sometimes referred to as
frescoes, were cheaper substitutes for mosaics, and on occa-
sion mosaics replaced earlier paintings. Except for differences
of techniques, the styles are basically the same. Only the reli-

The best known of all mosaics are those of·the choir, of *San Vitale* (540–548 A.D.). From vault to pavement, in a closely woven pattern chiefly of green, purple, and delicate grays, mosaics and veined marble slabs cover every surface. The decoration of floral motifs, acanthus scrolls, medallions, and figures conveys a sense of an over-all preciousness, as a radiance of color from every direction envelops the beholder. The aisle windows admit daylight, which reflects from vaults and walls as a warm glow and makes a luminous background for the dimmed choir. Unlike the reasoned clarity of the Parthenon or the grandeur of Hagia Sophia, the mosaics of San Vitale depend on an effect of color, based on an insistent and all-embracing continuity of mosaic and marble encrusta- tion (Fig. 57).

Two panels achieved world renown. One represents Em- peror Justinian, church dignitaries, and a palace guard (Fig. 58) as standing within the sanctuary of San Vitale (Otto von Simson), on the right side of Christ in the apse, and Empress Theodora and her court ladies about to enter on the left side. Each sovereign bears a bowl of gold as a votive offering to the church. The halos around their heads are em- blems of power used in Roman art for gods and emperors. In Christian art halos became marks of sanctity for Christ, the Virgin, and the saints. Theodora's headdress gleams with gold and mother of pearl, the border of her gown shows the Three Magi, indicating that, like the Magi, the royal court also brings gifts to Christ. The slightly larger than life-size elongated figures merge in a tapestrylike pattern, though it is not necessary to look upon mosaics as imitation of textiles. Flat and "dematerialized," they seem to float in the air; they are above reality, and thus closer to the divine. The heads, treated as portraits, indicate that the mosaics are historic, hence very real in their imperial authority. Standing, an imperial couple is crowned by Christ (ivory of Romanus II and Eudoxia); kneeling before the throne of Christ, Leo VI receives holy wisdom (mosaic at Hagia Sophia). The Em- peror receives directly from God both authority to rule and wisdom.

In the vault of the apse, Christ appears seated on a sphere between angels, about to present the martyr Saint Vitalis with a crown. Bishop Ecclesius stands by with a model of the church for presentation to Christ. Beneath the apse stood the altar, which was concealed in orthodox churches by the *Ikonstasis*, a screen shutting off the sanctuary from the nave. The ever-recurring celebrations of the Mass, symbolic of Christ's sacrificial death, are related to other choir mosaics representing a sacred repast from the Old Testament in Abra- ham entertaining the Angels, and the idea of sacrifice in

and serious Christ in the bust of the Pantocrator in the dome (c. 1100).

Sicily. The *cathedral of Cefalù* shows a further elaboration of the same Pantocrator type of Christ placed in the mosaic (twelfth century) of the apse, as the church has a basilican plan. The upper part of the apse is filled with the huge bust of Christ; in his left hand he is holding the Book, inscribed in Greek (left-hand page) and Latin (right-hand page), beginning with *"Ego sum lux mundi"* ("I am the light of the world"); with his right hand he makes the sign of blessing. The dark, somber Palestinian type of face with long wavy hair, black beard, and blue-and-gilt mantle is treated as a linear pattern in which every fold is exquisitely developed to bring out form as well as line (Fig. 59). Immaculate in detail, the total impression is commanding to express the divine "energy" of the "image of God." The ancient Egyptians' idea of the colossal statue to denote superhuman power reappears in a Christian setting. Below Christ, in a smaller scale, is the Virgin as an orant between two archangels.

Greek artists from Constantinople executed the mosaics for the Norman King Roger II, who had taken Sicily from the Moslems. Like his successors, he was a devout Christian and prolific builder; his buildings of Sicilian-Romanesque architecture combine the Moslem, Byzantine, and Norman styles. The Cefalù mosaics bear a resemblance to the cycles of mosaics of *Monreale* (late twelfth century). The royal chapel at *Palermo* (*The Palatine Chapel*) contains mosaics of rare beauty, among which the *"Entrance into Jerusalem"* is a fine example.

Torcello and Venice. The *basilica of Torcello* near Venice has in the apse a fine mosaic of the Madonna standing and holding the Child (twelfth century). Her figure, blue against gold, stands alone; empty space is used to achieve the monumental effect unique to Byzantine art. *The Last Judgment* (Fig. 60) on the opposite west wall contains, among its many scenes, one depicting sinners in hell. Two angels tend the fires of hell, while little blue devils are busily tugging at the heads above the flames in order to push them back. Turbans on some heads indicate that Moslems were fair game, properly consigned to hell; others wear crowns or look like persons of rank—a telling example of artists wreaking vengeance on sinners in high places. The artists did not invent the conception of hell as a lake of fire and brimstone into which the devil and his followers were to be thrown on the Day of Judgment. It was based on the Book of Revelation, was taught by the theologians, and described by Dante in his *Inferno*.

(Roman, Early Christian, and Byzantine) are known. The pure Hellenistic style of Alexandria is illustrated in one leaf from a marriage diptych (Fig. 61) of the late fourth century, which bears the name "Symmachorum" (Victoria and Albert Museum; the other half of the diptych is in the Cluny Museum). A young woman before an altar drops incense into a flame. Drapery suggests the form beneath; a linear pattern adds a note of delicacy and, in addition, demonstrates exquisite craftsmanship.

The well-known episcopal chair of Maximian of Ravenna was probably commissioned by him after 548 in Constantinople (Otto von Simson). The chair is entirely covered with carved ivory plaques, originally thirty-nine, showing scenes from the Old and New Testaments. Figures of St. John the Baptist and the four evangelists are combined above and below with vines and scrolls enclosing peacocks, stags, lions, and other animals. The carving is vigorous and combines various influences. The muscular, rugged types of the plaques representing the story of Joseph suggest Syrian and Persian influences as practiced in an Egyptian workshop (Charles Diehl).

The religious ivories of the second Golden Age are most typically Byzantine. They depict Christ, the Virgin, groups of figures, or scenes from the New Testament. The center panel of a triptych shows the coronation of Romanus II and Eudoxia by Christ (959 A.D.) The base suggests the dome of Hagia Sophia (Bibliothèque Nationale). One of the finest is the *Harbeville triptych.* In the center (upper panel), the enthroned Christ is between St. John the Baptist and the Virgin in the scene of the *Dëesis;* five apostles and eight saints fill in the other panels.

Ivory plaques of the standing Madonna holding the Child show an extraordinary refinement of design and workmanship (Fig. 62). The drapery became a precise and delicate surface pattern with an emphasis on aloofness from reality, detaching the figure from everyday life. Such cool perfectionism suggests the spirit of Greek art without its sensuous living quality. In such ivories, no other medieval style matches the Byzantine for austerity and elegance.

Metalwork. Byzantine silver is known from various finds as far apart as Great Britain (Traprain Treasure), Rome (Esquiline Treasure), and South Russia. The famous silver *Chalice of Antioch,* discovered in 1910, is covered with decorative reliefs, a closely spaced grapevine enclosing twelve seated figures and Christ giving the law to the apostles. It may have belonged to a fourth-century basilica, but there is no evidence that it goes back to the time of Christ. Silver vessels were mostly for use in the church. A

arly Medieval
nd Romanesque Art:
0 B.C. - 1150 A.D.

Periods. We may divide the span of two millennia from the end of the Bronze Age (1000 B.C.) to the end of the Romanesque (1150 A.D.) into three parts: (1) The Early Iron Age (1000 B.C.–100 B.C.), still prehistoric before the preliterate cultures came into contact with the Romans; (2) Roman Provincial and Migration Period art (c. 100 B.C.–c. 800 A.D.), which came to an end with Charles the Great; (3) The Carolingian Renaissance and Ottonian style, which developed into the mature Romanesque (c. 800–1150) and produced a wealth of monuments in all countries.

The Early Iron Age, 1000 B.C.–100 B.C. When northern Europe was last mentioned (p. 26), it was still in the Bronze Age. This was followed by the Early Iron Age divided into an earlier Hallstatt and a later La Tène period. The Hallstatt period is named after a cemetery in the Austrian Tyrol and La Tène, after an excavated military post on Lake Neuchâtel in Switzerland. The La Tène culture (c. 500 B.C.–100 B.C.) covered central Europe from the British Isles and southern Scandinavia to the Black Sea. The Celts (or Gauls) inhabited western Europe south of the Rhine-Danube line. Celtic burial sites have yielded many kinds of metal objects, including weapons, wheels from chariots, twisted metal collars called torques, plaques, brooches, pins, and mirrors. Occasionally the Celts buried their chiefs with their chariots, complete with horses and harness. Fine examples have been excavated in France and in Britain such as the embossed and enameled shields of Witham an

Ill. 87 Back of bronze mirror from Desborough. *After British Museum guide to Iron Age antiquities* (1925)

Thames (British Museum). A bronze mirror (Ill. 87) from Desborough shows the La Tène type of design at its best, combining lively vigor with elegance and refinement. Its basic scroll and palmette elements belong to many periods; in this case contact with Greek art contributed to the development of the self-assured mastery of La Tène design. The art of about the same period in eastern Europe is represented by a gold belt plaque from the Black Sea region.

veloped by the Teutonic people. Its simplest form was much
like our modern safety pin. Plate brooches made of gold or
other metals and inlaid with garnets or enamel are typical
of migration ornaments, as. illustrated in two Visigothic
eagle fibulae (Fig. 65) found in Spain (sixth century). This
combination of gold and garnet inlays prevailed throughout
the whole region; there are no pronounced stylistic differ-
ences. The hilt of the sword (Bibliothèque Nationale, Paris)
of the Frankish chieftain Childeric (d. 481) is important
as a dated piece of a known historic person. Its jeweled
mountings are in the style of the Visigothic fibula. Surface
patterns were based on chip carving executed originally in
wood, or featured animal motifs. According to one point of
view, this type of Migration art—gold with inlays—is an ex-
pression of Germanic taste, though influenced by Roman art.
Alois Riegl believed that the style was a Roman invention, and
that the objects were made in Roman factories and exported
to the provinces. An "artistic intent" (*Kunstwollen*), or, in
other words, a change in taste on the part of the later Roman
Empire resulted in a preference for color in isolated units.
The effect was intended for a distant rather than near
view; impressions of color were preferred to an apprecia-
tion of form (Riegl). Whether it was made by Germans or
Romans, the style is primitive in its repetition of chevrons,
crosses, lines, and dots, as in a Lombard fibula (Fig. 66), and
is unlike earlier classic ornament.

Architecture. Only a few examples have been preserved of
Migration architecture, the most important being *Theodoric's
tomb* in Ravenna, representing the Ostrogothic Kingdom in
Italy (493–555). It was built during Theodoric's lifetime; he
died in 526. Because of the small size of the two-storied
polygonal structure of cut stone, it could be roofed over by
a flat dome 36 feet in diameter carved from a single block of
Istrian stone. More lid than dome, this method of covering
a tomb recalls the dolmens of prehistory. What little carv-
ing has been preserved suggests wood carving translated into
stone. Narrow slits in the walls made for a dim illumination
for the stone sarcophagi, which stood in recessed niches; the
staircases were added in the eighteenth century. Bronze
grilles, once used for the second-story gallery, appear to
have been removed to Aachen by Charles the Great for use
in his own palace chapel.

For two centuries Italy endured a second Germanic oc-
cupation under the Lombards (568). Held inferior to the
Goths in artistic interest, the Lombards contributed a type
of stone-carved surface ornament, braided and interlaced,

used for panels, railings, and altars. Examples are preserved in churches in Lombardy, particularly at Ravenna and Cividale.

The Visigoths also left a few architectural monuments in Spain and southern France, where they had established the Kingdom of Toulouse (418). Visigothic rule in France lasted less than a century, as it was overthrown (507) by another Teutonic tribe, the Salian Franks. In Spain, Visigothic power endured until the Moorish conquest (711). Thus Spain was a Roman province for six, and a Visigothic Kingdom for two, centuries. Romans, Visigoths and Moslems left their mark on Spanish art. Two Visigothic architectural monuments in Spain are of interest. A small basilica, *San Juan Bautista*, built at Baños de Cerrato in Valencia near Valladolid in 661 during the reign of the Visigothic King Reccesvinthus—the same king who left us his crown—shows a horseshoe arch, a type of arch usually ascribed to Moslem architecture. This slightly different type of horseshoe arch appeared half a century before the Moslem invasion of Spain. If it was not a Visigothic invention, it reached the West from the East independently of Moslem influence. In the extreme north of Spain, in the province of Asturias, never occupied by the Moors, there is a small church called *Santa Maria* at Naranco near Oviedo. Though only 12 feet wide, the church or hall has a ribbed tunnel vault, an unusual feature for so early a church (dated 848). Such advanced construction did not appear elsewhere until the Romanesque period. Throughout this period, styles have little to do with races. Names like Visigothic or Lombard have become attached to those finds discovered in the regions where Visigoths and Lombards lived.

Early Art in Britain and Ireland: Manuscripts and Stone Crosses. After southern Britain had become a Roman province (43 A.D.), the Celtic mirrors and shields that lent such distinction to the late La Tène style in Britain gave way to Roman art. The Roman period is now represented chiefly by architectural remains, tombstones, and mosaic pavements. After the Romans had withdrawn from Britain, the arrival of the Saxons forced the Christian church to retire to Ireland. The pagan Jutes, Angles, and Saxons developed the "Migration style" industrial arts, as in square-headed metal brooches and disk brooches set with garnets and pearls in the cloisonné technique.

Irish Manuscript Ornamentation. A style of manuscript ornamentation, called Nordic in contrast to the southern classic Roman, is represented in its most intense expression in the books of Durrow (seventh century), of Lindisfarne

(c. 700), and of Kells (c. 800). They are Gospels, written o vellum, their ornamental pages without text. The ornaments style of the *Book of Durrow* is uncompromisingly massiv and metallic, and shows no interest in the human figure. St Matthew is like a panel for a grille in red, yellow, and green with symbolic feet and a disk for a head; the border consist of interlaced ribbons curled into loops with birds' heads, thei long beaks closed around their own tails. Though wholl orderly, the impression is one of an impenetrable maze There is no trace of a human element; closely packed braided figures on another page are set against rectilinear ironlike grilles. Spirals shoot off trumpets and ribbons, all in a tigh mesh filling the rectangle held in by a broad border of similar structure. As T. D. Kendrick has shown, the style of the *Book of Durrow* was a local development derived from late Roman British mosaic pavements (Dorset and Somerset). from enameled and metallic ornaments, and even from Coptic or Syrian sources. "It is basically the art of the British Church, introduced into Ireland at the time of the flight to the west before the advancing Saxons" (Kendrick). A development of the Irish art of the *Book of Durrow* appears in the more sumptuous decorations of over thirty ornamental pages of the *Lindisfarne Gospels* of the monastery of Lindisfarne near Durham. The ornament is reduced in scale to "a tightly woven web," in which the animal heads in complicated patterns are more natural and convincingly real and birds take on realistic details. In this advanced stage of ornamentation, a climax is achieved in the two letters *Chi Rho*, the sacred monogram of Christ (Matthew 1:18), which in the Latin text begins with *Christi autem generatio sic erat* (Fig. 67).

The ultimate of extravagant ornamentation appears in the most famous of Irish manuscripts, the *Book of Kells*. The whole page here is given over to the *Chi Rho*; only one more word appears below (Fig. 68). The size of the page is 13 by 9½ inches, having been cut when the book was rebound (c. 1800). Each of the four Gospels has its own main page. Ornamental motifs of great variety and richness combined into a closely packed pattern where the principle of dominance and subordination find a brilliant application. The interlace appears in countless variations. Large circles as major accents are reduced to smaller circles and to still smaller filling ornaments; shapes that seem to expand freely are gracefully swept back into controlled areas. These elaborations of line and shape are enlivened with color applied in small areas. Each color is fresh and brilliant and retains its own identity, as may be seen in a facsimile edition published

by Trinity College, Dublin, where the original is kept. The ornamental style of the Celtic manuscripts on occasion introduced the human figure, as a Madonna and Child in the *Book of Kells*, but the figure is so ornamentalized that its ugliness is repellent (Fig. 69). It is this lack of comprehension of the human figure that contrasts the Nordic with the Classic style, in which the figure is all important.

Stone Crosses. This element of figure sculpture is present in the Northumbrian stone crosses at Ruthwell and Bewcastle. *The Ruthwell Cross* is a tapering shaft of red sandstone over 17 feet high. Opposite sides have each five figure reliefs and carved vine scrolls containing birds and animals. In one panel, Mary Magdalene at the feet of Christ raises an arm, an attempt at action beyond the experience of the carver. In the frontal figure of Christ, the lumpy drapery composes into a dignified total. The idea of story-telling figure sculpture was imported; the style is Anglo-Saxon, the cross type of monument probably Irish. At a time when there was little monumental stone sculpture in western Europe, it is noteworthy to find it in the extreme West, which had little experience in this medium. It is possible that the ancient menhir cult was of some aid in the missionary work of the Church in introducing the carving of stone crosses.

Carolingian and Romanesque Art, 750–1050 A.D. Of the Teutonic tribes which participated in the migrations, the Franks prevailed in the end. After Charles the Great had changed his capital from Paris to Aachen, the German-speaking part of the Frankish Empire gained importance, and, in 842 the Oath of Strasbourg, the earliest extant document written in French rather than Latin, was proclaimed. After Charles's death, his empire was divided in 843 at the Treaty of Verdun, the beginning of France and Germany as separate nations. During his rule (771–814), Charles the Great started a cultural movement that looked to sixth-century Ravenna for guidance. Charles placed Alcuin (782–796) in charge of organizing the arts for the purpose of furnishing instruction through pictorial means. The primary objective was educational rather than aesthetic. The Carolingian Renaissance produced a few architectural monuments in France and Germany which prepared the ground for the Romanesque. The later Ottonian period was dominated by the German emperors, Henry I, three Otto's, and Henry II (d. 1024). The true patrons of the arts during this period were powerful ecclesiastics, princes of the Church like Archbishop Egbert of Trier, Bishop Bernward of Hildesheim, and Abbot Odo, who founded in 930 the monastic order of

Fig. 105 Church of St. Mark's, w[
façade, Venice. *Courtesy Pan Am*
ican World Airways

Fig. 106 Canaletto: View of the
Ducal Palace, Venice. *National*
Gallery of Art, Kress Collection, 1939

Fig 108 Cathedral of Chartres, a[
chivolts, west façade, south port[
Archives Photographiques

Fig 107 Cathedral of Chartres, west fa-
çade, south portal. *Giraudon*

Fig. 109 Annunciation and Visitation groups, west façade, central portal, Rheims Cathedral. *Giraudon*

Fig. 110 Charles V, Louvre. *Giraudon*

Fig. 111 Claus Sluter and Claus de Werve: The Well of Moses, Abbey of Champmol, Dijon. *Giraudon*
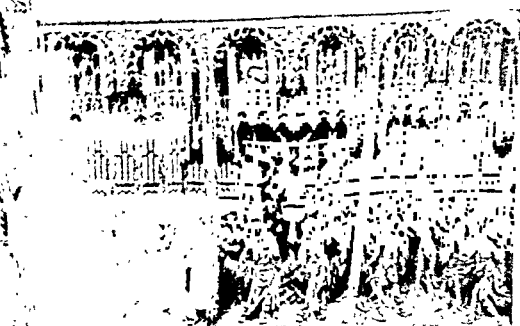
Fig. 112 Jan Borreman. Retable of St. George, wood, Musée du Cinquantenaire, Brussels. *Copyright A. C. I. Bruxelles*

Fig. 113 The Holy Trinity, alabaster, English School, late thirteenth century. *National Gallery of Art*

Fig. 114 Visitation of Mary, Bambe Cathedral. *Stoedtner*

Fig. 115 Tilman Riemenschneider: Saint Burchard of Würzburg, detail, wood, Franconian. *National Gallery of Art, Kress Collection, 1945*

Fig. 116 Madonna with Child fr Dangolsheim, wood, c. 1470, Ber Museum. *Staatliche Bildstelle*

Fig. 117 Herman and Regelindes, Naumburg Cathedral. *Stoedtner*

Fig. 118 King Stephen, Bamberg Cathedral *Stoedtner*

Fig. 119 Hans Brügge-mann: Christ in Purgatory, altar, detail, cathedral of Schleswig. *Landesamt für Denkmalpflege, Schleswig-Holstein*

Fig. 120 Bernt Notke: Saint George and the Dragon, after the reproduction in St. Catherine's Church, Lübeck. *Courtesy Angelsachsen Verlag, Bremen*

Fig. 121 Lady with the Unicorn, tapestry, Homage to the Betrothed, Cluny Museum, Paris. *Archives Photographiques*
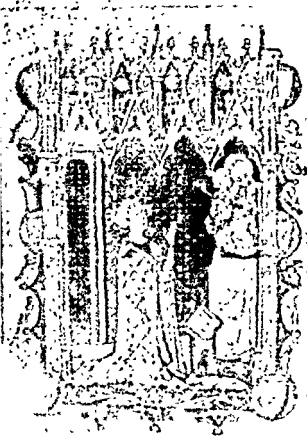
Fig. 122 Yolande de Soissons kneeling before a statue of the Virgin and Child, manuscript psalter, French (Amiens), thirteenth century. *Courtesy the Pierpont Morgan Library, New York*

Fig. 123 Limbourg Brothers: The Very Rich Hours of the Duke of Berry, April, detail, Condé Museum, Chantilly. *Archives Photographiques*

Fig. 124 The Wilton Diptych: Virgin, Child and Angels; King Richard II, St. Edward and St. John the Baptist, left panel, English, c. fourteenth century. *Copyright National Gallery, London.*

Fig. 125 Stephan Lochner: Madonna in the Rose Arbor, Wallraf Richartz Museum, Cologne. *Marburg*

Fig.126 Martorell: St. George and the Dragon, 1430. *Courtesy Art Institute of Chicago, The Charles Deering Collection*

Fig. 127 Pietà from Villeneuve-les-Avignon, *c.* 1485, Louvre. *Archives Photographiques*

Fig. 128 Duccio: Madonna and Child with Saints and Angels, section, Cathedral Museum, Siena. *Alinari*
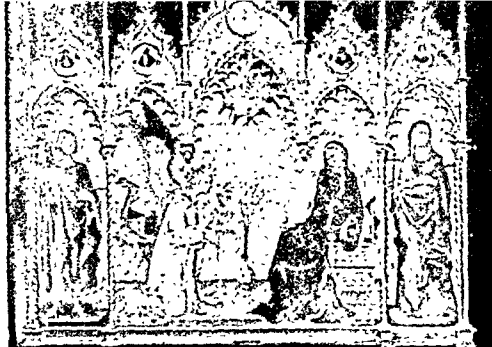
Fig. 129 Simone Martini and Lippo Memmi: Annunciation, Uffizi, Florence

Fig. 130 Giotto: Joachim and the Shepherds, section, fresco, Arena Chapel, Padua. *Alinari*
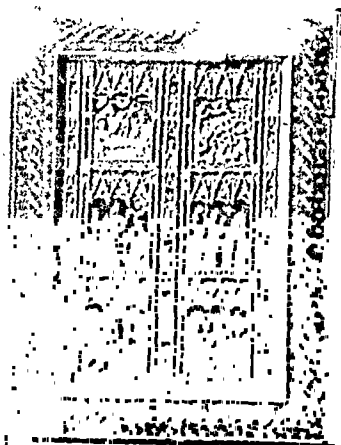
School, fifteenth century. *National Gallery of Art, Widener Collection, 1942*

Fig. 132 The Trinity, gold and enamel morse, detail, Burgundian or French, *c.* 1400. *National Gallery of Art, Widener Collection, 1942*

Cluny, which became a leading artistic and cultural center. Much of Carolingian art was still of the portable variety, book painting, goldsmiths' work, and ivory carving. Sculpture in the round hardly existed; an exception is a bronze equestrian statuette, traditionally accepted as representing Charles the Great (Musée Carnavelet, Paris).

Architecture. Carolingian architecture hardly compares with the Romanesque and Gothic; the actual remains are not impressive. The basilican plan developed from a *T* shape into a Latin cross plan. Piers replaced columns in the still unvaulted interiors. A plan of the famous Benedictine monastery of Saint Gall has been preserved, consisting of the church and many buildings conceived as a complex self-supporting community. It is unknown whether this plan represented the actual monastery or was only a project in the planning stage. The most important Carolingian monument was the *Palace Chapel of Charles* at Aachen, inspired by San Vitale in plan, but not in interior effect. The modest dome, less than 50 feet in diameter, is divided into eight sections to correspond to the octagonal plan. Imported columns were used, as well as the above-mentioned bronze grilles (p. 141) from Theodoric's tomb in Ravenna; no mosaic decoration has been preserved. Until the Romanesque period, this chapel was the most important building in northern Europe since the Roman period.

After the year 1000, building activity throughout Europe increased, resulting in Romanesque architecture. It has been claimed the end of the world was expected in that year, and that when the "zero hour" passed and the fear was dispelled, there was a renewed interest in the future, which led to increased building. Ecclesiastic architecture was the most important, though Romanesque architecture also developed the castle. Classic, Byzantine, and native elements contributed to the development of local styles. All Romanesque styles used the round arch; a desire for fireproofing buildings led to vaulting. Labor was unskilled compared to the highly developed craftsmen of classical antiquity. Except in parts of Italy, stone rather than marble was used. Italy had three styles, the Lombard, the Tuscan of central Italy, and the south Italian and Sicilian. Germany had mainly one style, the Rhenish, closely related to the Lombard style.

Lombard Style. Since Lombardy had been taken over by the Franks after the defeat of the Lombards, there were close political ties between Germany and Italy, which are reflected in Lombard and Rhenish Romanesque architecture. A famous band of masons, the Comacini (named after an island in Lake Como), are believed to have spread the Lombard

style to other countries. The Lombard style developed the most advanced structural system, but not the largest or most impressive churches.

The great invention of Lombard architecture was the rib vault. In contrast to the monolithic Roman concrete vault, the Lombard vault was constructed of separate stones that formed projecting ribs on which the "web," the stone ceiling, rested, so to speak (Fig. 70). The projecting (or salient)
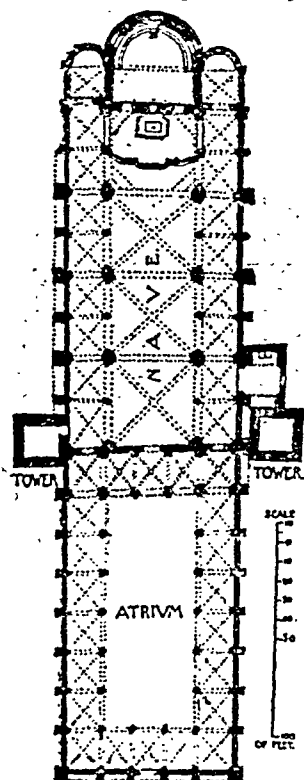
Ill. 88 San Ambrogio, plan.
After Simpson (1929)

arches divide each square vaulting bay into four parts. Each bay has two diagonal arches, two transverse arches spanning the nave, and two wall arches, one on either side of the nave. Five of these ribs come together on each of the four piers that mark the corners of each vaulting bay. At *San Ambrogio* at Milan (Ill. 88) this pier is a compound pier, which means that each of the five vaulting ribs has its own separate part in the compound pier, the thrust of each rib transferring to its own pier. To resist this thrust, a projecting buttress is placed opposite each pier and appears on the exterior like a piece of wall set at right angles to the nave. At San Ambrogio neither nave nor piers are impressive, because a second-story aisle conceals the buttress and takes away the light, making the nave dark and gloomy. In Gothic architecture, this system, developed and carried to greater heights, produced spectacular results. Romanesque vaults, as in San Ambrogio, are higher in the center than at the transverse arches. As the diagonal ribs are semicircles and the diagonal of a square is longer than one side, each vault has a domical effect. This means that each vault is a unit by itself and the nave ceiling, divided into pockets, is without a unified effect. One large pier alternating with one smaller pier, as two bays of the aisle correspond to one nave bay, is known in architectural terms as the alternate system.

Externally the Lombard style used corbel tables as horizontal bands in the same way in which Roman architecture used cornices. (*Corbel tables* are projecting courses of masonry, carried on corbels or brackets, often connected by arches.)
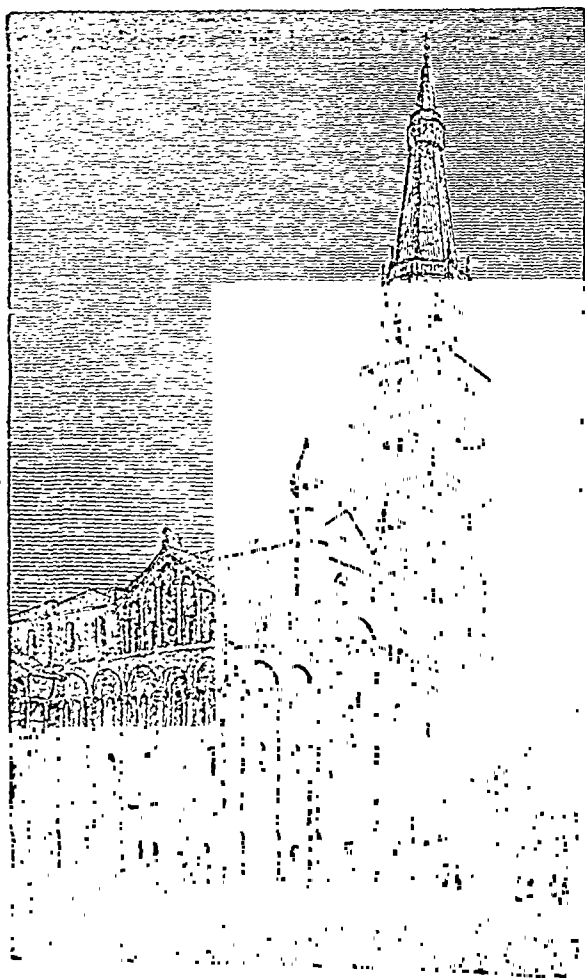
Ill. 89 Modena Cathedral, exterior. *After Lübke*

The classic pilaster became a pilaster strip of no definite proportion, and open arcades appear under the eaves (Ill. 89). Due to thick walls, Romanesque portals were developed into recessed carved archivolts, which are the molded bands carried around the arched opening and continued to the ground in carved jambs. Capitals showed a variety of shapes, at times

vealing a relationship to classic forms, as in borders of
inted or carved acanthus leaves. The plainest type was
bical; in it the pure classic tradition disappeared completely,
nd nothing was left of the precision workmanship that
haracterizes Greek or Roman work. The façade of *San
Michele* at Pavia is haphazard in its use of carving, as if
meant to display existing sculpture rather than to decorate.
San Zeno in Verona is exceptionally light and elegant, com-
bining marble with reddish sandstone. A specialty of Verona
is the Lombard porch in front of the portal with columns
resting on the backs of lions.

Tuscan Romanesque. The Tuscan Romanesque style of
Florence and Pisa became the most Italian of Romanesque
styles, just as the language spoken in Tuscany became the
Italian language of the country. The Italian characteristics
were a neglect of vaulting (only the aisles were vaulted),
of columns in place of piers, an effect of color in masonry
used in stripes through alternating light and dark marble and
the use of marble and mosaics for decoration, showing the
Byzantine influence. The Tuscan style shares the blind ar-
cades, corbel tables, and pilaster strips with the Lombard
style.

The outstanding example of this style is *Pisa*. The Cathe-
dral, Campanile, and Baptistery (Fig. 71) were built at the
height of Pisa's commercial supremacy, between 1063 and
1188. The *Cathedral* is entirely of marble; on the interior
here are alternating bands of yellow-white and dark green
The five-aisled basilica-type plan (312 feet long) has vaulte
aisles, but the nave has a timber roof. The interior effect
unified and festive and, in comparison with northern Roma
esque, light and airy. The west façade is made ornament
by a blind arcade and four superimposed open galleri
Called a "screen façade," it does not represent an attem
to express the interior of the building. The columns of
galleries are not always above one another, and on the si
the blind arches vary in height. John Ruskin praised
irregularity of the arches as a refinement, but Good
claimed it was accidental, due to the settling of ma
ground. Often the detail is superior to the total effect.
bronze lamp of the choir of Pisa Cathedral is said to
inspired Galileo's pendulum experiment (1581)—the
suspended pendulum swinging in a plane—proving tha
earth rotates about its own axis.

Italian bell towers, campaniles, are often detached,
Pisa's famous *leaning tower*. It probably settled during
ing operations, and was then continued in a leaning p
or it may have been intended as a leaning tower, as th

others besides Pisa. The tower has thick walls and is safe, as the center of gravity falls within the area of the plan. The lean was used by Galileo in his experiment with free fall using shot and cannon balls. Begun in 1174, the tower was completed 176 years later in 1350 by Tommaso Pisano. The third structure of the group, the circular *baptistery*, was begun in 1153, but completed in the Gothic style with crockets and gables.

Florence participated in the Romanesque and is represented by *San Miniato*, built on a hill overlooking the city. Refinement and emphasis on color by using marble inlay on the exterior in the form of geometric design differentiates the Florentine from the Pisan Romanesque. Elaborate mosaic pavements in light and dark are a unique feature. The exterior of the octagonal *Baptistery* of Florence shows an approximation to classic architecture in space division and the use of Corinthian capitals. Its double shell dome (not externally visible) influenced Filippo Brunelleschi in his design for the elegant cupola of the Cathedral of Florence. The Baptistery floor is covered by an inlaid pavement of white, dark green, and red marble, arranged in small pieces to form "rippling patterns which suggest running water . . . an allusion to the four rivers of Paradise, which are mentioned in the service for blessing the baptismal waters" (Lethaby). All children born in Florence were baptized in the *Battistero* or Church of San Giovanni Battista, to which Dante refers as "his beautiful San Giovanni" (*mio bel San Giovanni, Inferno,* xix, 117). To its bronze doors we return later (pp. 198, 230).

Sicilian Romanesque. Mentioned before in connection with mosaics, Sicilian Romanesque architecture is noted for its imaginative fusing of four styles. The plans are of the Early Christian basilican type, the mosaics are Byzantine, the stilted arches and interlacing designs on the exterior, as at Monreale, are Moslem, and twin towers, as at the west façade of Cefalù, are Norman.

German and Scandinavian Romanesque. In the large Rhenish churches of Speyer (Ill. 90), Worms (Ill. 91) and Mainz, the Romanesque achieved a unified national expression; the Lombard vaulted system was linked to picturesque exteriors. *Speyer* has vaults that are organic (nave 108 feet high) except for the missing diagonal ribs, and *Worms* has all ribs of the alternate system. The most impressive interior is *Mainz* (nave 88 feet high), where the vaults were built later and use some pointed arches. Exteriors are varied through round telescoped towers and a lantern over the crossing, grouped to make for magnificent silhouettes. Worms and Mainz have choirs east and west, the eastern for the bishop, the western

for abbot and monks. The entrance portals had to be on the sides and are inconspicuous. Open galleries within the thickness of the wall, borrowed from Pisa and Lucca, add to the picturesque effect of Rhenish Romanesque churches (Ill. 92).

Essentially, Romanesque exteriors are massive; solids predominate over voids and, externally, apses, lantern, and transept towers produce effects of monumentality. The German is the most homogeneous of Romanesque styles.

The German Romanesque style was carried to the Scandinavian countries; the *cathedral of Lund* in Sweden of the twelfth century is in the Rhenish style, built of local sandstone. Norwegian Romanesque churches were subjected to English influence, particularly in the *cathedral of Trondheim*, though it is now largely a Gothic structure. Stone architecture was introduced from other countries in connection with Christianity, which came to Scandinavia in the eleventh century, but a wood style was indigenous to all northern countries. Slavic and Germanic countries build in wood, laying
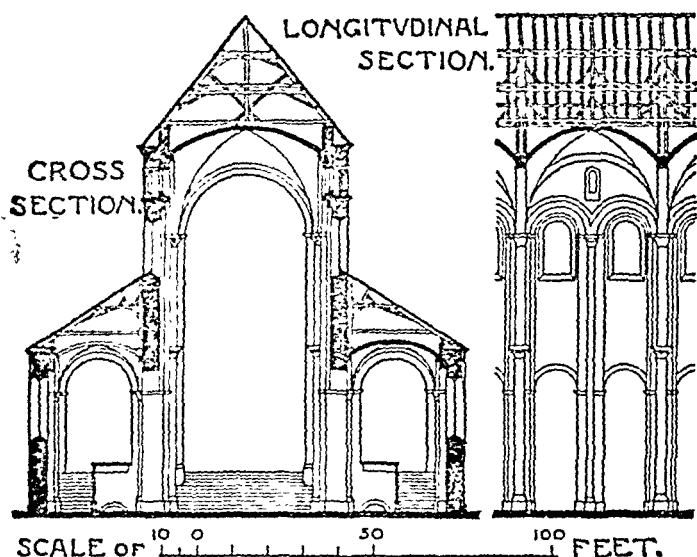
Ill. 90 Speyer Cathedral, section. *After Simpson (1929)*

the logs horizontally, as in American log cabins introduced by the Finns and Swedes. The early Saxons in Britain and the Norwegians set logs vertically, as in the stave churches in Norway. Steep roofs were common, due to the heavy snowfall of northern climates; the round arches were imi-

tated in wood to fill in as decorations between posts, and the Nordic animal-and-ribbon style of wood carving was used on the portals, as at Urnaes and Tind (Ill. 96). Gable ends were carved in shapes of dragons that recall the carved dragon heads of the prows of Viking longboats.
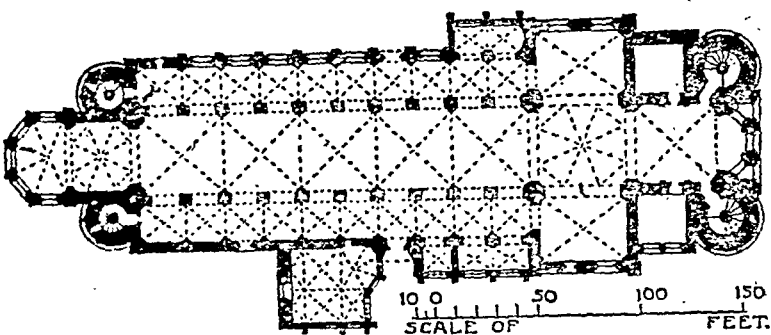
Ill. 91 Worms Cathedral, plan. *After Simpson (1929)*

The *Oseberg ship*, a royal yacht of about 850 A.D. belonging to Princess Asa, daughter of King Harald Redbeard, was accidentally discovered (1903) on the western bank of Oslo Fiord. The Princess had been buried on her ship with all the movable utensils of the household, a wagon, four sleds, chests, beds, armchairs (all carved), as well as tents, rugs, mats, wood pails, needles, thread, spinning and weaving equipment, gold, silver, and all the ship furnishings. For the first time, the existence of Norwegian wood carving was definitely proven, with examples illustrating several different styles and individual artists. The typical animal motif was well executed in a ferocious beast (Fig. 72) carved by the so-called "Baroque Master." The Oseberg ship (64 by 16½ feet), in an excellent state of preservation, is now at the Oslo University Museum.

An earlier boat (75 by 10½ feet, with 15 rowing benches) had been filled with weapons and sunk as a victory sacrifice in the fifth century, after being used by the Saxons to invade England. Excavated in 1863 in the moors of Schleswig. this ship is in Kiel, Germany.

Scandinavian ships differed from other contemporary boats in that the bow and stern rose higher above the water than did the vessel amidships, and both ends were pointed. The breadth of beam and curving ends give these ships a great sweep and elegance of line, considered both from the point of view of structural logic and as an abstract design.

French Romanesque. France developed variety with at least seven style groups, centered from south to north in

Provence, Auvergne, Languedoc, Aquitaine, Burgundy, N
mandy, and Ile de France. Barrel vaults and Corinthi
capitals are typical of the style in *Provence*, as in the abov
mentioned *Saint Trophime* (Arles) and *Saint Gilles* (Gard
Auvergne, north and west of Provence, has barrel vaults fo
the nave and half barrel vaults for aisles; the church
Notre Dame du Port at Clermont-Ferrand is an example
Languedoc has the five-aisle barrel-vaulted church of *Sain
Sernin* at Toulouse with a lofty lantern over the crossing.
North of Languedoc and west of Auvergne is *Aquitaine* with
Saint Front at Perigueux with its domes; if not a copy of St.
Mark, it is a derivative of the Holy Apostle Church at Con-
stantinople. *Burgundy* had the magnificent five-aisled, double-
transept groin-vaulted *abbey of Cluny*, which was destroyed
during the French revolution, the *cathedral of Autun*, and the
abbey church of *Vézelay*. *Normandy*, influenced by Lom-
bard vaults, produced the most inventive vaulted system of
all Romanesque churches. The Normans improved the four-
part Lombard vault by adding an intermediate transverse rib
from the intermediate pier, thereby dividing the vault into
six cells instead of four. This system was used at Caen in the
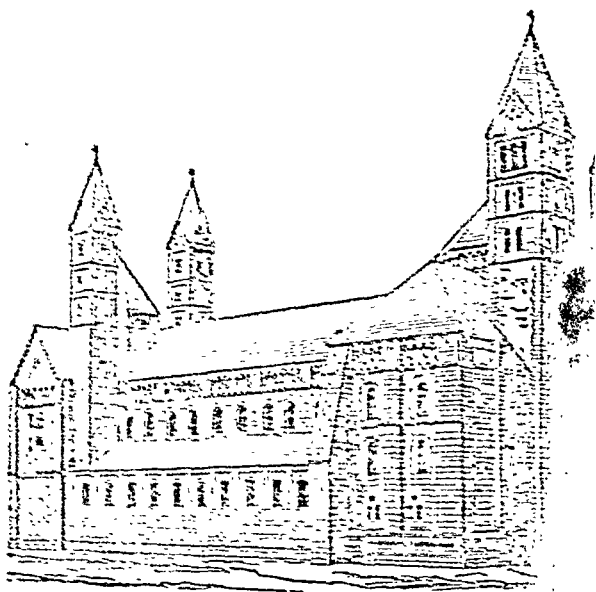
Ill. 92 Speyer Cathedral. *After Mathe*
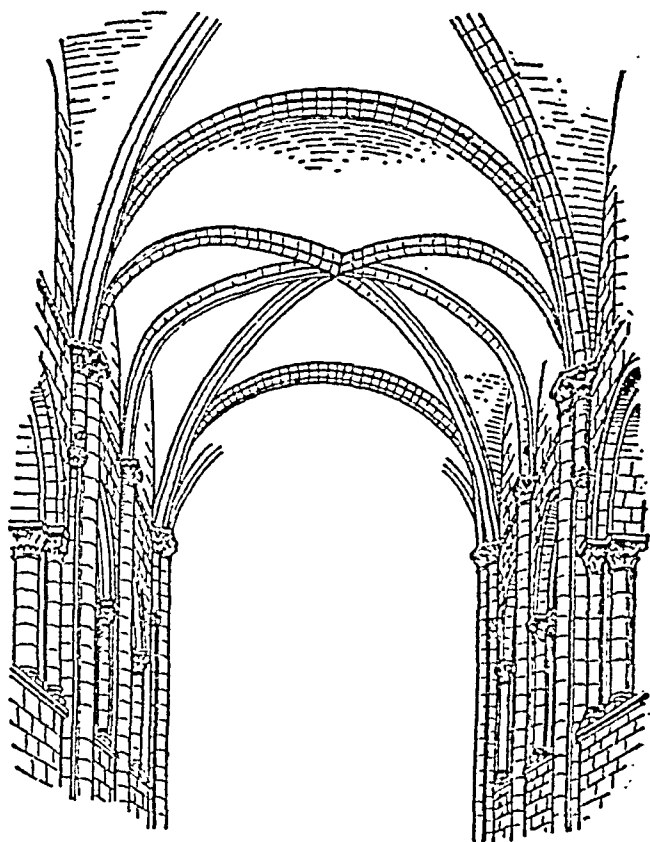
Ill. 93 Abbaye-aux-Hommes, vaulting system. *After Moore*

church of the *Abbaye-aux-Hommes* (Ill. 93 and 94), with half
barrel vaults over the aisle. In the smaller church of *La
Trinité* at Caen using the same six-part vaults, a series of
arches under the aisle roof set at right angles against the
outer walls transmit the thrusts to pier buttresses. The trans-
mission of thrust through a flying buttress, though still of a
primitive type, was an important invention of Norman Ro-
manesque.

English Romanesque. After England had been conquered
(1066), Norman churches were built in England that were
more massive than those in Normandy. In contrast to the
organic vaulted system of Normandy, the Engl.   ches
were built with wooden roofs. Even the fines   g-
lish Romanesque cathedrals, *Durham* (Fig.

level of the diagonal ribs, making a level ceiling possible. The diagonal rib at Morienval (north aisle) has no rib, but a pilaster strip in the compound pier to take the diagonal. In the aisle around the choir, called the ambulatory aisle, the transverse ribs are stilted and pointed, which is the Gothic method of solving the vaulting problem.

Spanish Romanesque. The Spanish Romanesque is a modification of the southern French of Auvergne and Languedoc; *Santiago* at Compostela resembles Saint Sernin at Toulouse. Roofs were flatter and sculptured decoration became profuse.

Romanesque architecture led consistently into the Gothic style, as the smaller churches of Ile de France demonstrate. This was but one of its characteristics; essentially Romanesque architecture was many sided and expressed the abilities of many regions.

Mural Painting. The age of Charles the Great (768–814) coincided with iconoclasm in the East (717–843). Charles took a reasonable attitude; he condemned image veneration, but encouraged images for purposes of decoration. Little remains of Carolingian wall paintings, but some are known from nineteenth-century reproductions on canvas. Of the many murals that once existed in the churches of the monasteries of Reichenau (Lake Constance), some fragments from a church at *Oberzell* give an impression of the pre-Romanesque style.

Murals from Romanesque churches have on occasion been recovered in fragments after removal of the overpainting of later periods. The paintings in the chapel of the Castle of Znojomo in Bohemia, dated 1134, were discovered in this way in 1949. A series of figures of
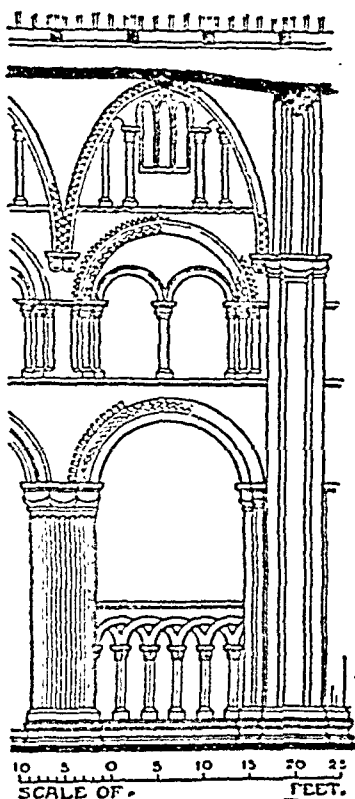
Ill. 95 Durham Cath. of nave. *After Simp.*

ancestors of the local feudal lord have a portraitlike quality, somewhat obscured by the heavy outline technique used. The murals of the early twelfth century of the Church of Saint Savin in France (Vienne) are well known. In such scenes as St. Michael on a white horse confronting the dragon or Christ entering Jerusalem, the flat tone and outline style uses earth colors against blues and greens.

Of Spanish Romanesque murals, the early twelfth-century frescoes in the little Catalonian church of *Santa Maria de Mur* are among the best preserved. These frescoes, painted *al secco*, were disintegrating on the wall when they were transferred, in an operation of extraordinary delicacy, to a new back, and reinstalled (*c.* 1921) at the Boston Museum of Fine Arts. The monks probably hoped, by decorating their church, to attract pilgrims returning from the famous shrine at Santiago de Compostela. The bones thought to be those of St. James the Elder had been taken to Santiago de Compostela, which rivaled Rome and Jerusalem as a goal for pilgrims. Roads through the south of France were repaired, bridges built, and monasteries established in aid of this traffic, which was a factor contributing to the spread of the Romanesque style.

Ill. 96 Portal of church at Tind, Norway. *After Lübke*

In the Santa Maria de Mur mural, Christ in Majesty in the shell of the apse is seated on a cushioned throne (Rev. 4:2) within a *mandorla*, an almond-shaped emanation of light surrounding the whole figure of Christ, against a background of whirling stars (Fig. 74). He blesses with His right hand and holds the open book in His left, as in the mosaics. The twelve disciples are painted life-size in a zone beneath Christ; St. Paul replaces Judas Iscariot. The style reflects the Byzan-

tine tradition; the delicately modeled drapery of the mosaics here becomes broad, massive, and flat, but the stern features are strangely elegant. The colors are red, ocher, cobalt, and black. The composition of Christ surrounded by the symbols of the four evangelists is believed to have been based on a manuscript illumination, *The Commentary on the Apocalypse,* by the monk Beatus of Liebana (786). The Beatus illustrations are flat, more pattern than picture, the figures rigid, angular in movement and without modeling. Like the Irish manuscripts, the Beatus manuscript reflects a severely ornamental and unclassic trend in medieval art.

The Bayeux Tapestry. Closely related to mural painting is this so-called tapestry, which is really an embroidery in wool thread on a linen strip less than 20 inches wide and 230 feet long. It tells the story of the historical events that culminated in the Battle of Hastings (1066), when William, Duke of Normandy, conquered England. For centuries it was exhibited at Bayeux Cathedral (Normandy) at the Feast of Relics. Its artistic interest is equaled by its historic importance. The style is vivid and executed with extraordinary skill. Action is clearly expressed, even in facial expressions, though there is no perspective or suggestion of form through light and shade. Suggesting the modern cartoon strip, events are told pictorially in historical sequence to appeal to an illiterate audience; for the learned, legends in Latin accompany each scene. One artist must have designed all parts, which may have been executed by as many as eight different groups of embroiderers. The so-called "laid, couched, and outline stitch" technique was used with particular skill. Whether it was produced in England or Normandy is not clear; arguments have been advanced for both. Perhaps the most recent investigations favor an English (Canterbury) origin, between 1066 and 1077, at the direction of Bishop Odo for the dedication of Bayeux Cathedral. It has been suggested that the underlying moral of the events illustrated may well have been that those who break a solemn oath taken on sacred relics come to a bad end. Harold, Earl of Wessex, was defeated and killed at Hastings. He had sworn allegiance to William, Duke of Normandy, and then had himself made king of England in place of William, to whom the last English king, Edward the Confessor, having no heir of his own, had promised the English throne. The tapestry is a rich source of information on Norman ships (Fig. 77) costumes, armor, warfare, and incidental details; stylisti- its in with illustrations in manuscripts of the same

Illuminated Books. Among the greatest l works of medieval art are the extravagantly

richly bound Bibles, psalters (Book of Psalms), missals and sacramentaries (used in the Mass), antiphonaries (sung passages), and lectionaries (read passages). These liturgical books were written in ornamental script on vellum (calfskin) or parchment (sheepskin) and bound in gold, jeweled covers (Fig. 78) or in carved ivory panels (Fig. 75). The arts of the painter, sculptor, and goldsmith united to achieve the utmost of splendor. These books were commissioned by princes and church dignitaries, and created by artists who were dedicated individuals, giving their best as a proof of piety. The Gospels, such as in the *Echternach Codex* (between 962 and 1056), were used in ritual to symbolize the presence of Christ. It was "placed on the neck and shoulders of the person to be invested as a symbol that Christ himself is the head of the person about to become head of the Church" (Peter Metz).

Full-page manuscript illustrations or illuminated initials virtually represent Carolingian and Romanesque painting, as panel painting was probably not yet fully developed and few frescoes have been preserved. Manuscript illustrations often show stylistic resemblances to larger works of sculpture and painting; the small-scale illustrations influenced the larger media. Romanesque like Byzantine art did not look to nature for models, but copied or adapted earlier works of art. In contrast to Byzantine art, Romanesque manuscript painting developed many local styles. The creative centers were in the northwest corner of Europe from Lower Saxony south to Lorraine, Ile de France, and across to England.

For the Carolingian style, the *Utrecht Psalter* (Fig. 76), now in Utrecht, but produced at Rheims, is a basic work. Whatever could be illustrated in the psalms was sketched in brown-ink miniatures, including many contemporary items—birds and animals, men in many situations, and elements of landscape. The fluid, sketchy, and energetic style of the 108 pages makes it an important work of art in its own right; it influenced much of later manuscript illumination. Roger Hinks calls the linear black-and-white technique of the *Utrecht Psalter* (eighth to tenth century) "a free-lance performance" in contrast to most other Carolingian manuscript illustrations, which follow the Palace School. The following text for Fig. 76 is from E. T. DeWald, *The Illustrations of the Utrecht Psalter*, Princeton University Press, 1932, Folio 63 verso: "The beardless, cross-nimbed Christ-Logos is seated in a mandorla supported by four angels . . . To the left, rays from a personification of the sun fall upon the psalmist who, carrying a harp, a lute, and a measuring rod, is walking in front of a cross-surmounted tabernacle. . .

('Awake psaltery and harp, I myself will awake early,' verse 3, 2; and 'I will measure out the convallen tabernaculorum,' verse 8, 7). In the center of the picture, King David is standing within a walled enclosure and holding a pair of shoes in his right hand ('over Edom will I cast out my shoe,' verse 10, 9). To his right in the middle of the enclosure three men are seated, Gilead, Manasseh, and Ephraim (verse 9, 8). Further to the right, over against the wall, Moab is holding up a cup, the *lebes spei meaé* (verse 10, 9). Outside the wall another man is measuring the ground with a rod. At the extreme right a portion of another walled town is shown. In the foreground to the left is a group of 'our hosts' (verse 12, 11)." "It was the liberating influence of the School of Rheims as in the *Utrecht Psalter* that prevented Romanesque art from becoming labored and formal" (Hanns Swarzenski, 1954). For the Ottonian Period around 1000, the *Gospel of Otto III* of the Reichenau School is a representative example. Depth of feeling and a highly imaginative rendition are illustrated in the painting of the evangelist *St. Luke in Ecstasy* (Fig. 79).

England developed an exuberant style of her own in the Winchester miniatures, which are rich in lively ornamentation. Italy, in the *Exultet Rolls* (Fig. 80), created a more natural figure style of illustration, firm and decorative without the emotional expression of the northern schools. These rolls were produced in the Benedictine monastery of Monte Cassino in southern Italy. The available reproductions of these manuscripts unfortunately are few (*see* Bibliography); a welcome addition to this hitherto neglected field is *The Golden Gospels of Echternach*, published in book form in 1957.

Goldsmithery and Metalwork. Book covers, altar frontals, portable altars, baptismal fonts, bowls, boxes, candlesticks, crosses, croziers, reliquaries, patens, chalices, and aquamaniles, as well as bronze doors, jeweled crowns, and related objects constitute the art of Church treasures, which are by no means "minor arts." In early primitive cultures, gold was associated with the sun, and thereby acquired a divine significance; precious stones were believed to have magical powers. In the medieval view, the more precious the material and the more painstaking the craftsmanship, the more pleasing the work appeared to God as an expression of the dedication of the maker. The artist did not labor for money, the use of which was still restricted in an economy tied to the soil, nor did he work for personal glory, as pride or sp   was sinful. Art, like virtue, was practiced for the   greater glory of God, not for the sake of the pr

donor; each man, be he craftsman or bishop, had his station
in life assigned to him by God. The Middle Ages submitted
to the power of art as a demonstration of God's power, not of
the artists' superiority. Thus an impersonal element is char-
acteristic of medieval art.

With these motivations in mind, we may appreciate what
is back of the extraordinary richness of gold and jeweled book
covers. With figures in *repoussé* (Fig. 78), the crucified
Christ is mourned by sun and moon, the Virgin and St. John
and two holy women (lower panels), and four angels (upper
panels). Rarely have precious materials been exploited to such
splendid effect. The plain surface of the immaculate back
panel and the delicate texture of the *repoussé* of the figures
create a pleasing contrast. The tension is increased and, with
a violent emphasis, the four central clusters and the broad
bands of the jeweled border burst into a climax of splendor.
This "most finished specimen of Carolingian goldsmiths'
work in existence" (*Illustrated Catalogue*, The Pierpont Mor-
gan Library, 1940) was made at Rheims or St. Denis about
870. The copper chalice with applied silver nielli at Krems-
münster (Ill. 97) is of about the same date, as it was pre-
sented by Duke Tassilo of Bavaria (748–788) and his con-
sort. The linear animal ornamentation of the Nordic style is
typical of England. Niello is a black compound of silver,
lead, copper and sulphur, which is applied like an enamel
to silver. The chalice from Saint Denis (Fig. 81), was made
almost three centuries later (c. 1140) for Abbot Suger. The
cup is made of a single piece of translucent sardonyx of
antique origin; rim, handles, shaft, and base are silver gilt
set with rubies, emeralds, jades, and pearls. Medallions em-
bossed in gold decorate the base. Though still massive and
sturdy, the proportions are lighter and the design more
elegant than the Tassilo chalice.

Enamelwork, in which the effect is essentially one of line
engraved in copper enamel against blue, achieved a dramatic
expression in the work of Nicholas of Verdun. His so-called
Verdun Altar (1181) at Klosterneuburg near Vienna shows
fifty-one enameled panels in champlevé, representing scenes
from the Old and New Testaments. In each framed panel an
ornamental figure composition, such as *Samson and the Lion*
(Ill. 98), stands out against the blue enamel. The action is
convincing and yet constrained; the expression of exertion is
felt in the total posture, but not in hands and feet. The un-
wieldy engraving technique made it difficult to carry expres-
sion that far.

Romanesque bronze casting achieved pre-eminence during
the eleventh and twelfth centuries in Lower Saxony. Hilde-

sheim, under Bishop Bernward (d. 1022), took the lead with the bronze doors of St. Michael, later transferred to the *cathedral of Hildesheim*. The doors were cast solidly, rather than in separate panels attached to wood. In the *Disavowal Scene*, the Lord points a finger at Adam who points to Eve who in turn points to the Serpent. In the *Expulsion Scene* Adam is already fumbling at the gate, ready to leave (Fig. 82). The Latin inscription reads: *"An(no) Domini MXV B(ernward) Ep(iscopus) dive mem(orie) has valvas fusile(s)"* [In the year of our Lord 1015 Bernward, Bishop of Blessed Memory (erected) these bronze doors]. Through gestures and ac-

Ill. 97 Chalice of Tassilo at Kremsmünster. After Lüthgen

tion, meanings are brought out. The motif, the mountains-like trees and the modeling under the drapery, are borrowed from the miniatures of the School of Reichenau. The slight figures in their bands and rings are also taken from the manuscripts of the School of Reichenau.

parts, including the heads, are more plastic than the draped portions. When the artist felt the roundness of form, he used full relief; to make room for the halo, the head of God is bent out of the plane. Elements that were derived from the artist's own experience are combined with suggestions that

Ill. 98   Samson and the Lion from Verdun altar, Klosterneuburg.
After Lübke

came to him from what he had seen in illustrations (Alcuin Bible). The abbreviated figures are placed against the empty background like illustrations in a book. The psychological interpretation is stronger than the formal rendering, which is still experimental. Without experience in sculpture, a primitive but spontaneous style sufficed; art itself was a mystery. One master artist probably designed the panels, which several craftsmen modeled in preparation for the casting in bronze.

The pictorial style of the door became sculpturesque in a slightly later (1022–1038) bronze column. It is 14 feet high and has a spiral frieze in the manner of *Trajan's Column;* it served as a candlestick at Easter.

A work sympathetic to contemporary taste is the bronze crucifix in the Abbey church of Werden, Westphalia (last quarter of the eleventh century) of the same Saxon School. A stylized body, about two-thirds life-size, is related to a sensitively modeled head with sharp ridges of brow and nose,

bulging eye and drooping mouth. The head is emphasized as seat of the spirit (Fig. 85). A major work is the bronze lion which Henry the Lion had erected at Brunswick (1166). Though stylized in structure and details, the lion still retains an expression of untamed ferocity, his mouth open, tail lowered, and legs firmly planted. These examples are but a few of the well-known bronzes that still exist.

Ivory Carving. Carolingian and Ottonian (ninth and tenth century) sculpture is represented by ivory carvings in form of book covers. In an ivory book cover, later used as the wing of a diptych (Fig. 75), the acanthus-leaf border and treatment of drapery are in the classic spirit. St. Gregory is seated in a niche, bent over, eagerly writing the opening words of the Mass, inspired by a dove symbolizing the Holy Spirit on his shoulder. On a lower register three scribes are individualized in posture and in facial expression. The shallow curtained niche, elaborated with architectural motifs, creates a frame which is packed with closely spaced sturdy figures with round heads and bulging eyes. This tendency to compactness and concentration also characterizes much of Romanesque art. It is apparent in a set of twelfth-century ivory chess figures discovered on the Island of Lewis (west of Scotland). The largest figure, although only four inches high, is truly monumental, a massive block on which details are engraved as surface decoration.

Stone Sculpture. The Carolingian Renaissance concerned only one section of northwest Europe; Romanesque sculpture in stone, largely architectural, included the whole of western Europe from Italy to Britain.

Carving in the round was re-established in Italy by Lombard sculpture of the early twelfth century, Italian sculpture having been under Byzantine influence since the sixth century. On the façade of the Modena cathedral, a new primitive school of sculpture is represented in a relief showing the *Creation and Fall of Man* (Fig. 86). From left to right are these scenes: the Creator, holding a book, in a *mandorla* held by two angels; Adam, sluggish and with bent knees, receiving life from God who, somewhat larger, stands erect beside him; Eve rising from the prostrate body of Adam at God's command; and Adam and Eve after the Fall standing beside the Tree of Knowledge and the Serpent. The heavy forms were derived from Ottonian manuscripts; an inscription and date, "Wiligelmus, 1099," translated into Guglielmo, points to a German origin, which is not surprising, since the German emperors claimed dominion over Lombardy. The bulky Lombard carving appears more refined in the later relief *The Descent from the Cross* from the pulpit of Parma

cloud bands, originally painted, separate the rows. The modeling is in flat, broad surfaces, the folds of the undergarments are heavily pleated. Angels are elongated and curved, and the elders twist each in a different way to suggest animation. The linear design, with its flourishes derived from similar mannerism in the pen-drawn miniatures, injects a fervor of its own. The jamb figures of St. Peter and Isaiah are among the most effective in medieval sculpture, exalted in movement and of great breadth.

The tympanum with the *Last Judgment* at *Autun* contains the most attenuated and free treatment of the human figure. In the center, Christ sits in judgment, St. Peter below leads a little soul (personified as a child) toward heaven; an angel lifts another into heaven above. St. Michael weighs the souls, as one devil pulls down the scales and another demon throws the damned into the mouth of hell. On the lintel below, the dead rise, the condemned twist in agony; those to be saved are comforted by angels.

Because the south of France had been a flourishing Roman province where classical antiquities furnished models, a more classic style of sturdy figure was developed in Provence, as at St. Trophime at Arles and at St. Gilles.

In Spain during the eleventh century, local schools of sculpture grew up in the provinces of León, Aragon, and Castile. In León, the style was characterized by large heads and hands and clumsy drapery. A particularly sensitive style was developed in the cloister of San Domingo de Silos as in *Christ and the Two Disciples on the Road to Emmaus*, the date of which is uncertain. It has been suggested (A. Kingsley Porter) that the extreme refinement of this relief was due to the fact that it was carved by Moorish captives working under Christian direction. Catalonia furnished some very attractive wood sculpture during the twelfth century, and isolated examples of the Romanesque wood sculpture have also been preserved in other countries.

Conclusion. The first millennium of the Christian era (100 B.C.–1150 A.D.) produced for the most part works of portable art. Indigenous stone buildings belong essentially to the last part of this period, the Carolingian and Romanesque periods (800–1150). Architecture, relief sculpture in stone and ivory, goldsmiths' work, bronze casting, mural and book painting were the fields in which Romanesque art excelled. Sculpture in the round and panel painting were as yet undeveloped. Art was closely linked to religion; a secular art existed, but fewer examples have been prese Provincial styles developed, due to the absence of a authority to supervise regions that were only begin

Gothic Art

1150 - 1400

Significance. The word *Gothic*, as applied to a style, was meant as an expression of contempt when it first came into use during the Renaissance. Gothic art was rejected as barbarous, and the style, quite erroneously, was linked with the Goths, even though they had long been absorbed in the population and no longer existed as a nation at the time the cathedrals were built. The eighteenth century also lacked understanding for the Gothic. Voltaire wrote "what unhappily remains of the architecture of those days," and Rousseau said of the Gothic cathedrals that they were "a disgrace to those who had the patience to build them." It was not until the nineteenth century that Gothic architecture became popular; like Greek architecture, it has had its revivals. Gothic style cathedrals, begun in this century, are still being completed.

The Gothic style is unique; though details may show a lingering classical influence, the total impression of the Gothic is the antithesis of Greek art. Historical styles of Western art from the end of the Middle Ages to the beginning of modernism are indebted, directly or indirectly, to either the Greek or the Gothic periods.

Economic Factors. Gothic cathedrals towered high above the roofs of the surrounding towns. Their size seems out of proportion to the small towns that built them. We have no exact figures on the number of inhabitants of medieval towns, but a town of six thousand was considered of good size. In the eighteenth century, Chartres had ten thousand inhabitants; when Chartres Cathedral was begun, it was probably large enough to hold the whole the town.

167

Where did the funds come from to keep so many crafts-men employed? This question has been answered by a reference to the growth of towns due to increased commerce by land and by sea, to the increase of royal power in France and England, to the Crusades, and to various contributing cultural developments. Though medieval towns developed from the administrative centers of an episcopal diocese taking in the surrounding countryside, and though pilgrims added to the congregations, such discrepancies between small towns and large cathedrals are still amazing. Out of an estimated five thousand inhabitants of Noyon around the year 1200, only two thousand actually came within the jurisdiction of the town (Charles Seymour).

It has been claimed, incredible as it may seem, that between 1180 and 1270 eighty cathedrals and nearly five hundred abbeys were built in France (Abbé Bulteau, quoted by Otto von Simson). Cathedrals were not built by slave labor as in Egypt; moreover, where figures are on record, the number of workmen at any one time does not seem to have been large. Each mason had several helpers and was assisted by carters, carpenters, ironworkers, and other laborers. In an age that could accumulate only enough financial support for the cathedral's building fund to last at best from one year to the next, the income to support the work came mostly from voluntary contributions of many people, often from deathbed donations.

Sale of indulgences accounted for some income. In the case of the Church of St. Victor at Xanten, one-third of the cost of the construction for the year 1487 came from that source. The south tower of the cathedral of Rouen was known as the *Tour de beurre* (butter tower) because the construction was paid for by money collected from indulgences to eat butter during Lent. A "good indulgence" was expensive; in 1398 at the cathedral of Milan it cost 500 florins (Bioto, quoted by Pierre de Colombier).

Contributions were often in the form of livestock; the records of the year 1387 for Milan cathedral mention the receipt of horses, mules, a donkey, a cow, and sheep. At Autun in 1294 a shop near the church portal sold such contributions for cash. The Queen of Cyprus sent gold cloth and a duchess, jewels.

When all Europe was united through the Christian church, funds were also collected abroad. Cologne sent emissaries to England to help raise funds for its cathedrals. The Cistercian Order used its international connections for drives, and Cistercians were considered to be effective fund raisers. In the beginning of the twelfth century, the city of Laon

paraded its relics throughout France and England to publicize the need for support; the possession of relics helped to encourage contributions.

Siena had a law compelling each citizen who owned beasts of burden to bring a load of marble to the cathedral site each year; the bishop allowed one indulgence for each load delivered. Santiago de Compostela made ingenious use of its pilgrims. On arrival at Triacastela (Galicia), each pilgrim was handed a block of limestone to be carried to Castaneda, where the lime kilns were located. Where there were Roman ruins, this material was salvaged and used.

Religious Enthusiasm. The construction of such large buildings would never have been possible had it not been for the religious enthusiasm of the times. A powerful emotional drive and willingness to sacrifice were essential to the success of these ambitious projects. Hope for salvation rather than a concern for art prompted many to heed the call for contributions. The customs of chivalry and the worship of the Virgin, which gave many cathedrals the name "Cathedral of Our Lady" (*Notre Dame*), characterized the period. On the other hand, fear and insecurity contributed to such phenomena as the wild excesses of flagellations and to the hopeless misery of the masses, who saw in the near future the coming of the Antichrist, the end of the world, and the Day of Judgment. The so-called "cult of carts" illustrates a phase of the extravagant religious fervor of the times. A letter of the Norman Abbot Haymo describes an event occurring at Chartres in 1144: "Rulers, princes, prelates . . . bound by straps to carts and like beasts of burden drag to the asylum of Christ loads of wheat, oil, mortar and wood. . . . A thousand or more men and women yoked to one cart in silence, except for confession of faults . . . and holy prayers for forgiveness of sin. . . ." (Porter, *Mediaeval Architecture,* vol. 2, Yale University Press, 1909). Abbot Suger thought such labors of little practical benefit, the real work in the construction of the cathedral being done by trained craftsmen. Still, the fact that man's emotions are capable of constructive as well as destructive ends is well illustrated by the change of spirit of the people of Chartres after the fire of 1194, which destroyed the cathedral and the town. It was first believed that the disaster was sent by the Virgin as a sign of displeasure, particularly since the sacred relic, the tunic of the Virgin, was believed to have perished. When the relic was discovered unharmed in the crypt, the intense grief and feeling of guilt turned to joy and det͟   tion to rebuild the church. The people now felt that   self had permitted the destruction of the o

has twice as many sides as the square, which recalled the four evangelists. Otto von Simson found that the architect used the proportions of the golden section in deciding on the dimensions of the different parts of the nave piers. The actual measurements were too close to the figures obtained by arithmetical means to have been accidental. Visual harmony was related to musical harmony, and both, to the mystery of redemption. Such matters may have been of no concern to the mason, but rather to the architect. It is not quite clear how fixed the architect's duties had become by the thirteenth century, as such medieval terms as *magister operis* (master of the work) were used loosely to include financial and administrative duties as well. The architect rarely lived to see the completion of his plans. Time was of little importance; the work transcended the individual.

Origins. The great Gothic cathedrals are located in the northwest part of France in the region around Paris, Ile de France. The system of rib vaults started in the small churches and was applied to a larger church, the Abbey of Saint Denis, in 1140. Architecturally speaking, this region had been backward compared to the south of France, where the large Romanesque churches were located.

Periods. The Gothic period has been divided into three parts: Transitional and Early Gothic (1150–1200), High Gothic (1200–1300) and Late Gothic (1300–1550) Due to the gradual development and the length of time it took to complete a cathedral, many show some mingling of styles from Early to Late. Of the large French cathedrals, Notre Dame (Paris), Chartres, and Bourges were begun in the twelfth century, as were Noyon, Senlis, Soissons, Laon, and Le Mans. Rheims and Amiens are of the thirteenth century; the Palais de Justice and several churches at Rouen, Abbeville (St. Wulfram), and the façades of Troyes and Tours represent the Late Gothic.

General Character. The linear tendency and other elements of the Gothic style originated in architecture and were applied to sculpture and painting. National characteristics were subordinated to a general expression shared by all the countries except Italy, which was less hospitable to the Gothic than the rest of Europe. Variety within the style is also typical; the Gothic was capable of unexpected solutions.

Structure and decoration were more of a unit in Gothic cathedrals than in Greek temples. Ornament seemed to grow out of the stone and the sculptured figure merged into the total structure. Through the elimination of large wall surfaces and the appearance of stained-glass windows, sculpture and colored light defined space and, at the same time, re-

lated the congregation with the world beyond the cathedral walls. No other style made translucent colored light serve artistic ends.

What the early Christian basilica aspired to, the Gothic cathedral brought to a climax. The blending of the religious and the aesthetic impulse inspired by Gothic architecture was expressed by Abbot Suger about his own St. Denis: "When the house of God, many colored as the radiance of precious stones, called me from the cares of this world, then holy meditation led my mind to thoughts of piety, exalting my soul from the material to the immaterial, and I seemed to find myself, as it were, in some strange part of the universe, which was neither wholly of the baseness of the earth, nor wholly of the serenity of heaven, but by the Grace of God I seemed lifted in a mystic manner from this lower toward the upper sphere."

Unlike Greek architecture, no single cathedral included all points of excellence. Amiens had the finest nave; Chartres and Notre Dame of Paris, the most spectacular glass; Rheims, the most inspiring west façade; Le Mans, the finest chevet-apse; and Beauvais, the loftiest choir.

The plan of the French cathedral was compact; transepts projected but little beyond the nave. Chartres, Rheims, and Amiens have a five-aisle choir, and the apse was developed with radiating chapels. A logical system was developed in the rib vault in a way that often seemed to deny that stone had solidity and weight. Rationality and emotionalism found expression in the cathedral. The medieval scholastic combined geometry with theology, as in the use of the equilateral triangle to demonstrate the mystery of the Trinity. Logic and speculation were combined in medieval thinking; the logic of thrust and abutment were used in nave construction while speculation on the terrors of the Last Judgment was set forth in the tympanum of the portal.

Structural Frame. A glance at the plan of a Gothic cathedral (Ill. 99, 100, 101) shows compound piers at each corner of a rectangular vaulting bay and isolated buttresses in place of the continuous walls of the Romanesque cathedral. The cross section (Ill. 102) shows the piers as well as the outside buttresses which, it has been claimed, reinforce the structure like props. According to this theory, advanced by Viollet-le-Duc and his followers, thrust and counterthrust gave stability to a framed skeleton construction (Ill. 103). Actual experience with vaults did not support any such theory; the vaults did not crash when a buttress was demolished, as happened on occasion, because the stones were laid in mortar and the stone skeleton achieved a monolithic

character. By using the pointed arch for the rib vaults, the crown of the vault became level, as pointed arches of different spans could be carried to the same height. It may be, however, that the builders were as much intrigued by the
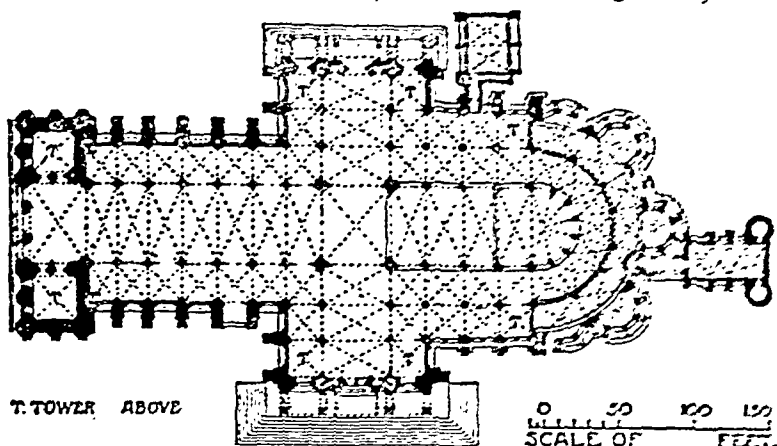
Ill. 99 Chartres Cathedral, plan. *After Simpson (1929)*

aesthetic appeal of pointed arches as by their structural advantages.

Development. Wall surfaces were reduced between buttresses to make room for windows that gained in width and height to accommodate the stained glass, which was held in by iron bars. When the windows became too wide for iron
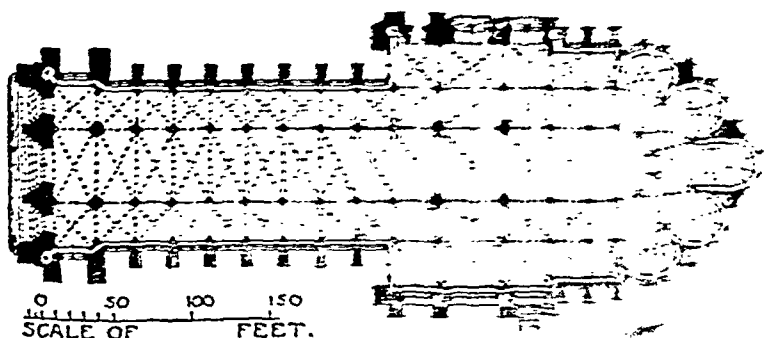
Ill. 100 Rheims Cathedral, plan. *After Simpson*

bars to hold the glass, the opening was subdivided by stone bars and the use of tracery was developed, with pointed arches, geometrical shapes and a great circular window at the clerestory level in the west façade and in the

The north tower was built 300 year ... and was finished in 1515 in the Flamboyant styl... trasting styles of the towers illustrate the con... turies; whole generations lived between the ... cathedral and its completion. The earlier part ... spected for reasons of sentiment, but each period... tions in the style of its own day. The south tower ... to the simplicity of the Romanesque façade, it i... unique in having a spire. The design of the spire ... octagonal base, is well suited to the square tower ... sition from square to octagon being skillfully han... architect of Chartres ... name was among those ...

The finest part of ... (1212-1490), ... building periods) is its ... (fig. 50), ... achievement which rank ... architecture of all time ... orderly: delicacy and ...

CROSS SECTION
OF AN ENGLISH
AND A FRENCH
CATHEDRAL.

SALISBURY

ILL. NO. Salisbury and Amiens cathedrals.

In spite of many differences, including ... buttresses, a strong contrast in ... mean together. The true ... ery immediately above the ... sible position ... are in wide ...

Fig. 133 Jan van Eyck: Annunciation to the Virgin, detail. *National Gallery of Art, Mellon Collection, 1937*

Fig. 134 Jan van Eyck: Giovanni Arnolfini and His Wife. *Copyright National Gallery, London*

Fig. 135 Rogier van der Weyden: The Nativity, Augustus and the Tiburtine Sibyl, and the Magi, Bladelin altar. *Berlin Museum. Photograph, National Gallery of Art*

Fig. 136 Hugo van der Goes: Portinari Altarpiece, central panel, Uffizi, Florence. *Alinari*

tion, 1937

Fig. 139 Fra Angelico: The Last Judgment, detail, center panel. *Berlin Museum*

138 Gerard David Rest on Flight into Egypt *National ery of Art, Mellon Collection,*

Fig 141 Andrea del Castagno (?): Portrait of a Man. *National Gallery of Art, Mellon Collection, 1937*

ig.140Masaccio: he Expulsion of dam and Eve. rancacci Chapel, armine Church, lorence

Fig. 142 Giovanni Bellini: Madonna with Saints, Frari Church, Venice. *Böhm*

Fig. 143 Giorgione: Sleeping Venus, Dresden. *Courtesy Inter Nationes (Bonn) and Stoedtner*

Fig. 144 Fra Filippo Lippi: Madonna Adoring the Child. *Berlin Museum. Photograph, National Gallery of Art*

Fig. 145 Botticelli: Portrait of a Youth, detail of hand. *National Gallery of Art, Mellon Collection, 1937,*

otticelli: Birth
Uffizi, Flor-
lerson
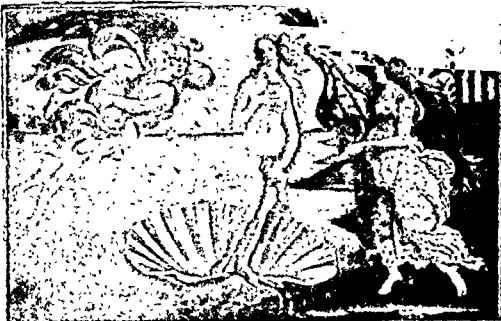
Fig. 147 Leonardo da Vinci: Last Supper, Milan. *After Seemann*
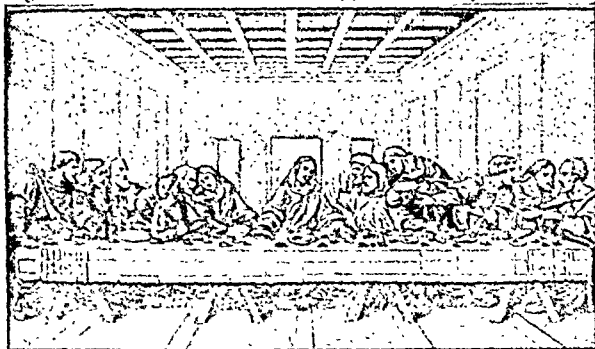
Fig. 148 Raphael: Sistine Madonna, Dresden. *Anderson*

Fig. 149 Raphael: Galatea, Farnesina Palace, Rome. *Anderson*
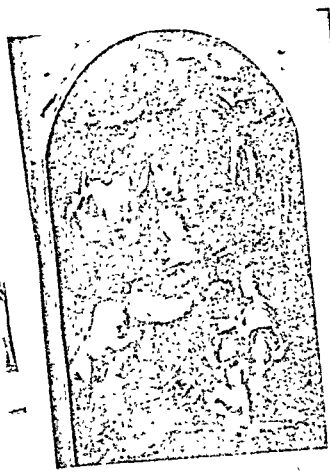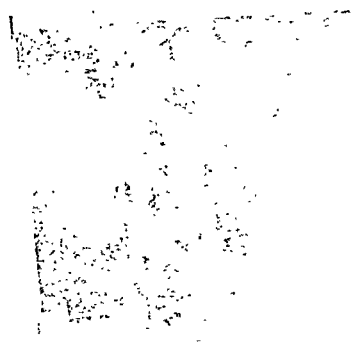
tion of Rheims, with its elaborate parapet, and its row of buttresses loaded with niches and pinnacles, is also effective. Transept towers were started, but never completed. Jean-le-Loup was the architect of the cathedral.

Amiens Cathedral (chiefly thirteenth century) in its nave (Fig. 91) unites clerestory and triforium and allows the vertical line complete dominance; of the vaulting shafts, only the transverse ribs are carried to the floor. A carved band below the triforium emphasizes the immaculate severity of the nave, which depends for effect on its architectural lines. The proportion of voids to solids is reduced to a minimum, unlike the hypostyle hall at Karnak, where the massive columns greatly reduce the space between supports. A glance up into the vaulted ceiling of the choir (Fig. 92) reveals the structural system, the large clerestory windows, the triforium gallery, and the arches of the nave arcade. In side view the high nave dwarfs the façade, as the towers barely surmount the nave roof (Fig. 93). The monumental sculptured portals project and are of major interest. Robert de Luzarches was the original designer.

Laon Cathedral (begun in 1165) has six towers, an English-type plan, and a west façade which is fantastic in its massive voids and complex structures. Carved oxen look down from the towers, in honor of the animals that dragged the stones to the building site.

The façade of *Coutances* in Normandy has a strange, fairyland quality. Halfway up past the arched buttress is a lonely region, removed from the huge portals at the street level. The change in scale and the use of many small openings and turrets in the tower account for the effect (Fig. 94).

Late Gothic Architecture in France. By the end of the thirteenth century, the style had reached maturity in the great cathedrals. During the fourteenth century, the trend to verticality increased, ribs became lighter and tracery more frail, and with the fifteenth century a new decorative system, the Flamboyant, developed. Lines in tracery became wavy, flamelike, concave and convex profiles alternating. Lacelike effects were obtained in openwork gables and spires. Delicacy rather than strength was aimed at: the churches Saint Vulfram at Abbeville and St. Ouen at Rouen are examples. Rouen, formerly the capital of Normandy, is rich in Gothic architecture. One of the finest of French Flamboyant, St. Maclou at Rouen (Fig. 95), was not completed until the Renaissance. On the west façades of the early sixteenth century, stone achieved a lacelike delicacy. Architecture was turned into a vast relief in which architectural details were made into a frame for sculpture. The stone was cut

the nave: its great length and the central tower are English characteristics. *Lincoln Cathedral* has a screen façade, Norman in the lower section, and massive square towers finished in the Perpendicular style. The angel choir is an excellent example of the Decorated style, the name referring to relief-carved angels between the triforium arches. *Westminster Abbey* also shows French influence in the west façade, the chevet-apse, the high nave (c. 100 feet), and exterior flying buttresses. Among the characteristic features of the English
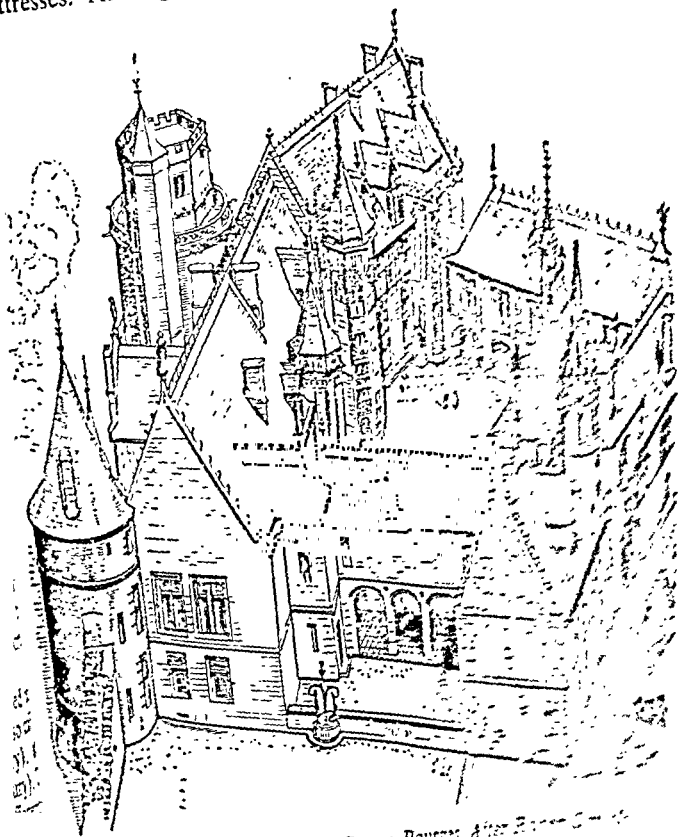
Ill. 104 House of Jacques Coeur, Bourges. After ~~~~~~

Gothic are ornamental vaults, chapter ho~~~~ ~~~~ ~~~~ and large east end windows. In the nave and ~~~~ ~~~~ *Cathedral* of the Decorated period, many ~~~~ each support, forming long triangular sp~~~~ Fig. 96). These tierceron vaults meet ~~~~ idge rib. In *King's College Chapel* i~~~~ these spreading ribs are connected ~~~~
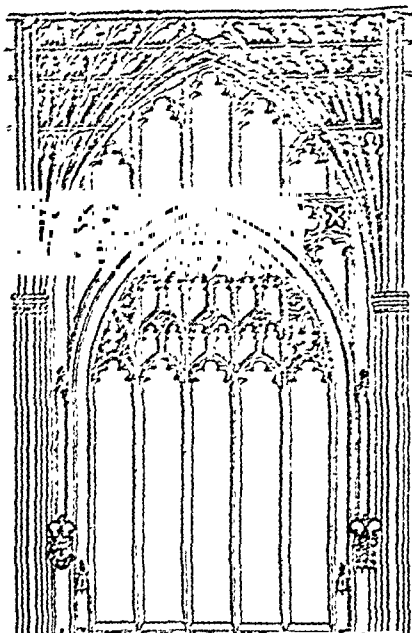
liernes (Ill. 105), and at *Gloucester Cathedral* cloisters (Fig. 98) the ribs are of a uniform curvature and form concave conoids. At the summit of the vault, patterns of tracery are linked to the conoids. In the *Henry VII Chapel* (Fig. 99) at Westminster Abbey the most sumptuous fan vaults have elaborate stone pendants suspended from the two sides and the center of the vault. Decorative wall paneling, three and four centered arches with square hood moldings above and parapets and deep buttresses on the exteriors are characteristics of the Perpendicular style. These vaults, as well as the fan vaults that radiate from a central column to the sides of the polygonal chapter house ceilings, are the most ornate the Gothic style developed. The cathedral chapters erected separate meeting halls, the offices of the cathedrals, as at Lincoln, Westminster, Salisbury, and Wells. Decorative stone vaults had a counter

Ill. 105 King's College Chapel, vaulting, Cambridge. *After ... son (1929)*
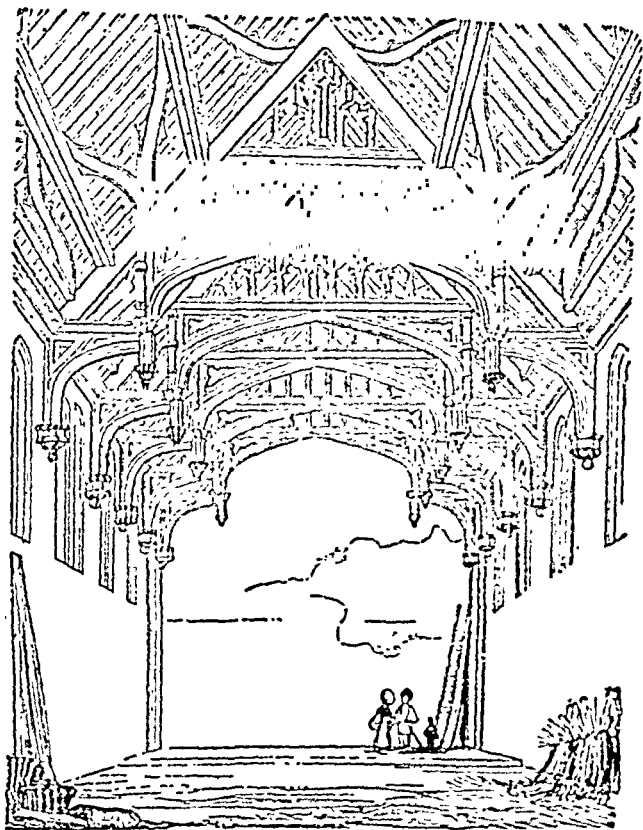
Ill. 106 Eltham Palace Hall. *After Roger Smith*

part in the exposed timber roofs supported on trusses. The largest trusses are the so-called hammer-beam trusses with intermediate uprights on brackets extending from the wall (Ill. 106). Elaborate stone vaults and wooden truss roofs are distinctly English contributions. The damp climate of Britain has left it mark on the exterior stonework of medieval buildings, and the scouring effect of the wind and weather is also evident on the buildings on the Continent. The corrosion that has taken place over the centuries is shocking when seen for the first time.

Gothic Architecture in Germany. The Gothic did not have a consistent development in Germany, but was taken over from France; a term for German Gothic was *opus francigenum* (French work). Some early churches represe~~~
compromise between German Romanesque and French G~~
Bamberg, Naumburg, Münster, Strasbourg, and Freibu

in this group. It has been said that the largest French cathedral is in Germany, as Cologne is an adaptation of Amiens, though it differs in details. It was left unfinished until 1842; after the original plans had been found, the completion of the cathedral was carried through, inspired by popular support. In our own day, the city rallied again to repair the damage done to the cathedral in the Second World War. The Minster of Ulm (1377–1529) did not complete its single tower (528 feet high) until the nineteenth century. A specifically German custom was the use of open, pierced spires, as at Cologne, Freiburg, Strasbourg, Vienna, Regensburg, and Ulm.

The most original of the German Gothic churches are the hall churches (*Hallenkirchen*). These three-aisled churches have aisles with vaults as high as the nave, such as *Saint Elizabeth* at Marburg (1235–1283) and *St. Lorenz* (1445–1472) at Nuremberg. The surfaces of barrel vaults were covered with a network of decorative ribs, as in the *church of St. George at Dinkelsbühl* (1448–1492) or the *cathedral of Halle* (begun 1529, Fig. 100). In these churches, the piers rise uninterrupted by capitals from floor to vault, the shafts of the compound piers continuing into the ribs of the vault; nave aisles and choir are unified. This late type of hall church represents an original development with little relation to the French type.

In north Germany and the Baltic provinces, brick was adapted to the Gothic and produced fine churches with tall narrow windows and ornamental step-gable ends. The thirteenth-century Cistercian monastic church of *Chorin* is more Romanesque than Gothic, its broad expanse of wall surface subdivided by narrow pointed arches, massed to emphasize verticality. *Pelplin* is a fourteenth-century Cistercian church in which the unadorned brick wall is featured almost for the sake of its own stark simplicity. Ornamental gables and ornamental brickwork are used for contrast and emphasis. The city hall of Königsberg is one of many that apply brick Gothic to a municipal building. The German Gothic varies from a close imitation of French to original solutions, which represent an expansion of the Gothic idea. Comparable civic buildings in western Germany were of stone and had ornate step-gables, as in the City Hall of Münster (Ill. 107).

Gothic Architecture in Spain. Spain adapted the Gothic of France and on occasion also took suggestions from German cathedrals, but the Spanish Gothic has a vitality of its own. The climate favored small openings and roofs that were less steep than in northern countries. On the exterior, smaller openings left larger wall surfaces for profuse carving, which

was contrasted with plain walls. In Seville roofs were quite flat and piers, widely spaced. Spanish interiors were gloomy and the size was obscured by having the choir (*coro*), west of the crossing, shut off by a screen from the nave. Other Spanish peculiarities were the *capilla major*, the apsidal chapel, bound by the ambulatory and screened off from the church, and the *retablo*, the great carved screen back of the altar. Moorish influence determined the rectangular mosque plan of *Seville Cathedral*, which was the second largest of any Christian church measured by floor area.

The Gothic lasted longest in Spain, where new cathedrals were started in the sixteenth century. Spain had fewer
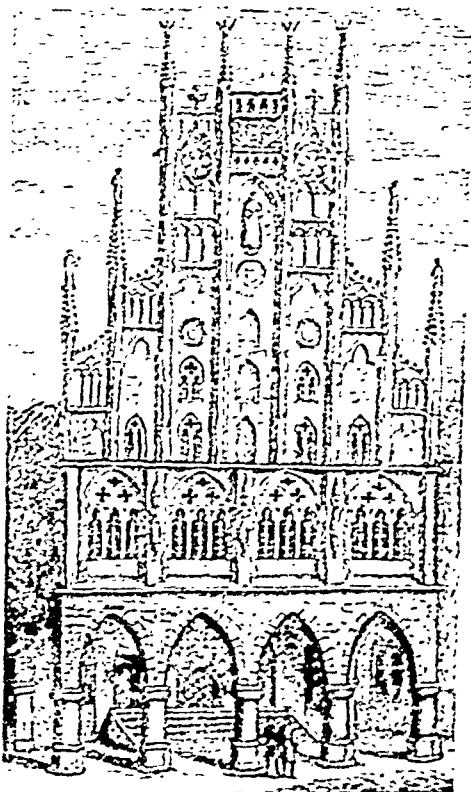
Ill. 107 City Hall, Münster. *After Seemann*

Gothic churches because parts of the country were occupied by the Moors until the late fifteenth century. Moorish mosques were consecrated as Christian churches, as in the case of Cordoba Cathedral. Even so, Spain has a number of large Gothic cathedrals, of which *Burgos*, with its elaborate furnishings, is the outstanding example (Fig. 101). Burgos has seven bays, a pentagonal apse, and heavy cylindrical piers at the crossing for the support of a high lantern (*cimborio*). The vault of the lantern, which has windows to admit light, has a star-like spiderweb tracery ceiling. Other churches often show a mixture of Gothic and (Moorish) motifs in the so-called *Mudejar* style were Moors who remained in Spain after the rec late Gothic or Renaissance style of ornament

Orvieto, and Florence cathedrals and the church of Santa
Maria Novella in Florence; (2) the Venetian Gothic as rep-
resented by the Ducal Palace, parts of St. Mark's, and palaces
on the Grand Canal; (3) the imported Gothic of Milan
Cathedral; (4) municipal buildings as in Florence and Siena.
The mother church of the Franciscan monks, *San Francesco
at Assisi*, was the result of Cistercian influence, but the
church, built by the Tyrolese architect Jacob of Meran, looks
more Romanesque than Gothic (completed 1253). Built on a
hill, it has an upper and a lower church, and is best known
for its frescoes, painted by Giotto. The rose window and
the pointed arches, due to French influence, are the Gothic
features. The single-nave hall-type church was adopted be-
cause the sermon received emphasis in the Franciscan serv-
ice. *Siena Cathedral*, designed by a sculptor, Giovanni Pi-
sano, is a dazzling creation of red, black, and white marble,
in which no parts seem to have been left uncarved. The pres-
ent nave was planned as a transept, with a still larger church
to follow. Building was interrupted in 1348 by the plague;
the nave was never completed, though parts exist today as a
ruin on the south side. The present groin-vaulted nave of
white-and-green banded marble incrustation has round arches
and a hexagonal dome over the crossing. The inlaid marble
mosaic pavement is ornate and interesting, but it is kept
covered over.

Orvieto Cathedral, designed by Maitani, has perhaps the
most colorful façade in architecture, the hues varying from
light cream to nut-brown in glass mosaic and marble. A
direct front view is the most effective; it is essentially a
pictorial composition and more unrelated to the interior
than most Gothic façades. It was finished during the
Renaissance.

The cathedral of Florence (Fig. 104) *Santa Maria del Fiore*,
was planned by Arnolfo di Cambio to be larger than any of
Italy's other cathedrals. Its nave, about 450 feet long, is
almost as long as Milan, but has only four bays and is
spacious and bare. The pointed arched and ribbed vaults are
the only Gothic elements; tie rods are used and stiff
acanthus-leaf capitals are applied to square piers. The ex-
terior is paneled in white, pink, and green marble; the façade
is of the late nineteenth century. The dome belongs to the
Renaissance, and the detached campanile follows a design
of Giotto's (1334). It is a work of great distinction, fine in its
rhythmic progression in the size of the openings toward the
top. Its effect also depends on the white and colored marble
mosaic inlay and carvings.

Milan Cathedral (1386–1416), begun late
during the early Renaissance, has been much

the center of international trade·due to its·strategic geographic position. In addition, Venice was the largest grain market of Italy and was also the main source of salt. The city was ruled by an aristocracy of commerce which allowed the burghers and the Church a limited participation in government. By the middle of the fifteenth century, Venice had become a city of easy, comfortable living and a center of great architectural splendor.

The *Palace of the Doges* (*Palazzo Ducale*, 1424–1442, by Giovanni Buon Talenti and his sons), facing the Piazzetta, adjoins St. Mark's which, together with the Piazza and its campanile, form a justly famous architectural landmark. The charm of the Ducal Palace is in its open arcade in two stories. The two façades (Fig. 106) are of about equal length. The rose-and-white colored marble of the wall contrasts with the effect of light and shade in the sculptured arcades below. The capitals by Lombard stone carvers and the Porta della Caritas connecting the Doges' Palace to the Church of St. Mark's are extravagant in the richness of the carving and the elaboration of architectural motifs, mingling the flamboyant Gothic with suggestions of the Renaissance. The capital of the southwest corner toward the lagoon was particularly admired by John Ruskin, who wrote that it was "in the workmanship and grouping of its foliage" the finest he knew in Europe (*Stones of Venice*).

The *Church of St. Mark's* (Fig. 105) goes back in its present plan to 1063, when an earlier and smaller basilica was converted into a central-type church. Its foundation belongs to the second Golden Age of Byzantine art. The present Greek cross plan has five domes, one on each arm and a larger (40 feet in diameter) dome in the center; windows at the base of the dome furnish the illumination. Its bulbous-shaped domes, wood and lead covered, are for external effect and bear no relation to the lower internal brick domes. The impression of the exterior is based on a series of five arches resting on green marble and porphyry columns massed in superimposed groups within the portal jambs. Crests and crockets, polished surfaces of variegated marble, and colored mosaics create a fantastic variety of shapes, colors, and textures. Mosaics against a gold ground cover the vaults of the narthex and interior domes. An iconostasis with fourteen figures, the Apostles, the Virgin, and St. Mark separates the raised apse from the crossing. Many of the columns, of which there are said to be 500, were imported, and they vary from the Byzantine to the Corinthian type. Many and various statues from different periods have be St. Mark's. Perhaps the most significant single the group of four bronze horses placed abov

on Byzantine forms. The early period preferred simple bud-like forms, crisp and vigorous and studied from nature; later the style became more naturalistic, as in the *Vintage* capitals of Rheims. The foliage was applied; it no longer grew out of the capital. The gutters ended in open-mouthed heads of fantastic animals or gargoyles, through which the rain water was thrown away from the building. Other carved monsters or grotesques look down from the towers and galleries of Notre Dame of Paris.

Sculpture in France, Burgundy, and the Netherlands. The west portals of Chartres were consecrated to the glorification of Christ, who occupied the tympanum of the central portal, surrounded by the beasts of the Apocalypse. The south portal was dedicated to the Virgin and Child (Fig. 107), the north, to the Ascension. The portal figures, representing the ancestors of Christ, project from columns forming the splayed jambs of the portals; this type of jamb decoration became typical. The seemingly archaic frontal postures of the figures are adjusted to the width of each column. The strict parallelism of the delicately pleated drapery folds (Ill. 108) suggests the Byzantine influence, as in almost contemporary mosaic figures of the Palatine Chapel at Palermo. The personification of the liberal arts, represented in the archivolts of the south portal (Fig. 108), may have been a part of the influence of the Chartres School of Theology. The many thousands of carved and painted figures were not left to the carvers to select, but were based on a unified plan which illustrated a specific part of human knowledge—divided, during the Middle Ages, into natural, scientific, ethical, and historical knowledge. Victor Hugo has

Ill. 108 Jamb figure, west façade, Chartres Cathedral. *After Moore*
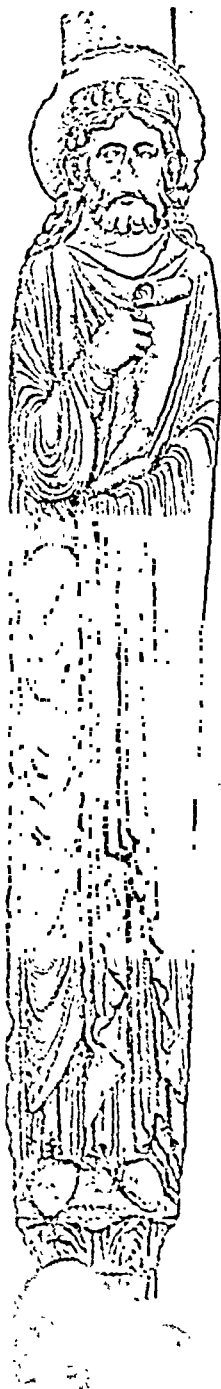
ant. Another series illustrates the months placed beneath the signs of the Zodiac. February is represented by an old man warming himself at the fireside; his boots, removed for comfort, stand beside him.

After the middle of the thirteenth century, the figure is represented with more action; the weight is shifted and rests on one leg, the other foot is drawn back (Ill. 110), as in the Virgin of the north transept of the Cathedral of Notre Dame. One of the best known is the Madonna holding the Child from the south transept of Amiens (*Vierge Dorée, c.* 1288). The smiling Virgin, crowned as the Queen of Heaven, turns toward the Child, who holds a sphere as an emblem of sovereignty; this side sway in the posture gives the figure a slight curve, which became the characteristic expression of the fourteenth century. A note of animated realism appeared during the second half of the thirteenth century in the *Last Judgment* on the central portal at *Bourges*. As St. Michael holds the scale for the weighing of good and bad deeds, the devil gives the scales a downward push. Satan took on a bestial ugliness; devils have a human face on their stomachs to signify that "the seat of intelligence had been placed in the service of the lesser instincts." The jaws
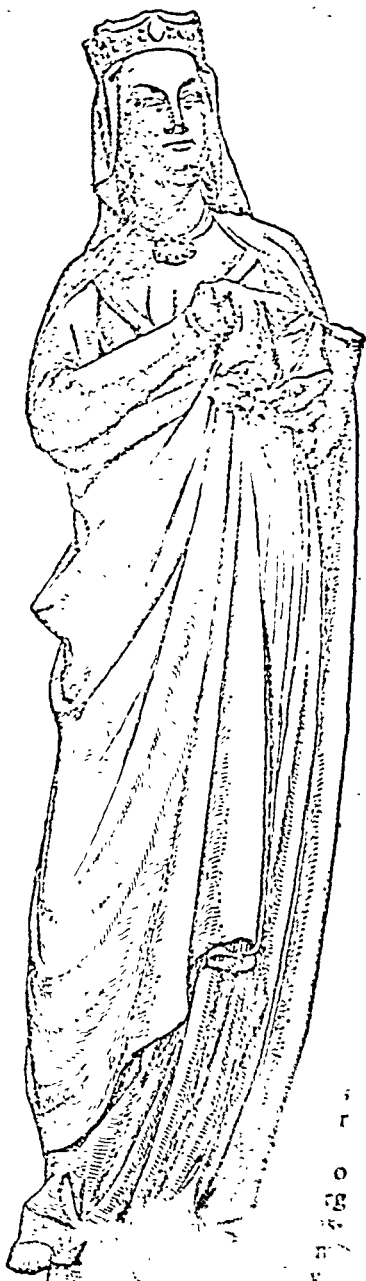
Ill. 110 Virgin, north transept, cathedral of Notre Dame, Paris. *After Moore*

Temperance, Prudence, and Justice, stand in the corners in contemporary costume. The imported white-grained Italian marble encouraged a precision in details, and the full drapery does not obscure the figure. The Italian Renaissance style is indicated in the niches containing the apostles.

Decorative sculpture in sepulchral slabs (Tournai), in metalwork (Dinant), and in wooden retables (Brabant and Antwerp) were manufactured in shops for sale throughout Europe. Retables were carved screens with shallow recessed niches formed by Gothic arches and tracery and made into a stagelike setting for groups of small figures, detached and carved in the round. The Passion and scenes from the life of the Virgin or of saints were represented. Jan Borreman (c. 1479–1522) was the best known of Flemish wood carvers of this period. We illustrate his *retable of St. George* (Fig. 112). Holland, in comparison with Belgium, occupied a less prominent place, but exhibited in her sculpture a homely realism, which is developed into a major style in seventeenth-century Dutch painting.

Sculpture in England, Germany and Austria, Italy and Spain. Figure sculpture in *England* covered façades in superimposed rows, as at the cathedrals of Salisbury, Lichfield, Wells, and Exeter. Destruction during the Reformation, from civil war and the climate, has still left enough to show that English sculpture was not inferior to Continental sculpture. The carved spandrels of the arches in the transept ends of Westminster and in the triforium arches of Lincoln, the *Angel Choir* or the standing *Madonna and Child* of the doorway to the chapter house at York Minster are representative examples. Not all the original 255 figures covering the façade of Wells Cathedral have been preserved; those of Exeter are badly corroded. The fine Purbeck limestone was used in thirteenth-century naves, but stone, bronze, alabaster, and wood became the favorite materials. A school of "Alabasters" produced sepulchral sculpture, knights in armor recumbent on an architectural base, as in the figure of *Edward II* at Gloucester. An alabaster statuette of *the Holy Trinity* at the National Gallery of Art (Fig. 113) represents the style. Of the bronze figures, the Queen Eleanor by William Torel in Westminster Abbey is one of the best, and in wood carving, finely carved choir stalls are those at Ely Cathedral.

German sculpture of the thirteenth century includes two main groups, the Saxon group, with Bamberg and Naumburg cathedrals, and the Rhenish group represented Strasbourg Cathedral. A close connection in style be Bamberg and Rheims indicates that the sculptor of

familiar with the sculpture of Rheims. The fully developed
Gothic style of the *Visitation* group from Rheims, when com-
pared to the *Visitation* group of the cathedral of *Bamberg*
inspired by Rheims, brings out the difference between the Ger-
man and the French style. In both cases the Virgin holds a
book in her left hand and extends her right outward. At
Rheims the motive seems natural and intelligible from all po-
sitions. The head is slightly turned, and the hands stop at dif-
ferent levels. In the corresponding figure at Bamberg, the back-
ward bend of the right leg and right arm, though clear in side
view, is lost in front view (Fig. 114). The French sculptor alter-
nates smooth and folded parts of the drapery, the German
artist envelops his figure with an even mass of closely
spaced folds. The process of combining a side view with a
front view as we have it in the first half of the thirteenth
century resulted, in the second part of the century, in truly
organic and plastic sculpture in the series of figures from
the choir of *Naumburg* representing the *Founders*, who
had, a century before, contributed funds for the building of
the cathedral. The drapery hangs in broad, loose folds, well
separated from the figure. In these figures of great stability
and power, the German Gothic reached its full bloom. In
the group of *Herman and Regelindes* (Fig. 117), the woman
is smiling, the man, sad; such expressions are devices to
suggest animation rather than characteristics of individuals,
as to the artist the founders were but names in a docu-
ment. In the *Bamberg Rider* (Fig. 118) the man's eyebrows
are straight and angular to suggest masculine strength and
energy.

own period is carried into the illustrations from the Old Testament. In a thirteenth-century French manuscript illustrating 183 events, from Genesis to the life of David, the figures are the knights in armor of medieval France. King Saul, addressing his army, wears a crown, and is clad in chain mail, and medieval cavalry is fighting with broadswords and lances. (The Pierport Morgan Library, New York. M638.)

In the fourteenth century, Jean Pucelle, the outstanding miniature painter, developed a refined style that influenced illumination for two centuries. From five to six manuscripts have been attributed to his atelier, the most important being the *Belleville Breviary* (1342). Text and decoration became a unit, and included small miniatures in frames as well as freely disposed figures on the lower border. Pucelle no longer used solid gold backgrounds, but an ornamental frame around the text of sprigs, leaves, insects, flowers, and birds in gilt and color. Book illumination flourished in Paris while the Hundred Years' War between France and England was going on. King Jean II le Bon (1350–1364) and King Charles V the Wise (1364–1380) attracted miniature painters to Paris, and Duke Jean de Berry was an active art patron.

The Book of the Hours, known as *Les Très Riches Heures*, was painted by the three Limbourg brothers (Pol, Hermann and Jean) for the Duke of Berry. This precious book was painted in thin body color on parchment; it stands at the d of all Books of Hours. Of the 129 pages, twelve illus- e the labors of the months, which include landscapes . ig. 123). Fashionably gowned court ladies pick flowers on the green for the month of April. The illustration for January shows the Duke's banqueting hall with richly dressed courtiers; the one for December, a boar hunt with a ducal castle in the background. One must linger over these exquisitely finished paintings; they require careful inspection to reveal their charm fully. The stage of development represented here combines seemingly primitive characteristics with a sophisticated elegance based on line and ornamental pattern in costume. The aristocratic persons are highly stylized to best show off their fine costumes, but peasants go about their work in more natural postures. What appears as a difference of styles also denoted social distinctions of class.

Pol Limbourg was the Duke's *valet-de-chambre* and André Beauneveu, sculptor, architect, painter, and illustrator, occupied a place of honor and trust at the ducal court. Painting in France during the second half of the fourteenth century was a luxury available only to the king and the nobility. The Duke's passion was collecting works of art and keeping artists busy. He traveled from one of his seventeen

Fig. 170 Durer: Portrait of Hieronymus Holzschuher. *Berlin Museum. Photograph, National Gallery of Art*

Fig. 171 Dürer: Four Horsemen of the Apocalypse, woodcut. *Courtesy L. J. Rosenwald*

Fig. 172 Dürer: Melencolia, engraving. *National Gallery of Art, Gallatin Collection*

Fig. 173 Holbein: Portrait of George Gisze. *Berlin Museum. Photograph, National Gallery of Art*
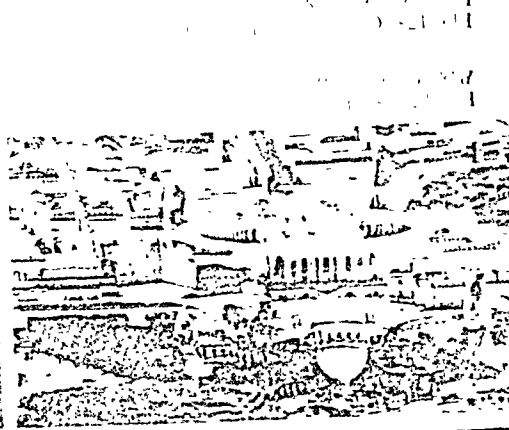
Fig. 179 Chateau of Chambord, France. *Courtesy French Government Tourist Office*
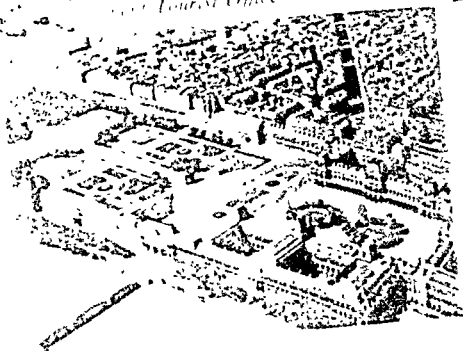
Louis XII and Anne St. Denis *Archives*
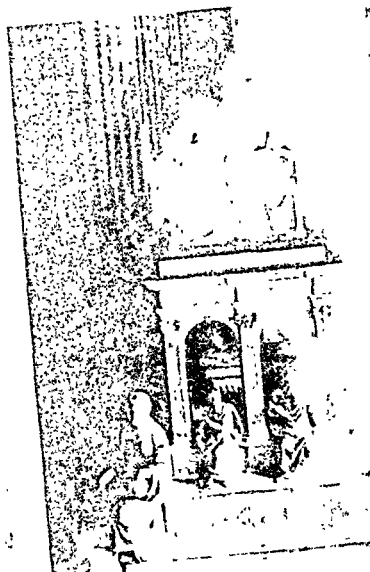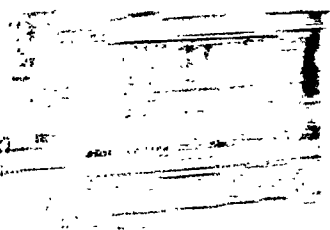
Fig. 188 Bernini: Louis XIV, bronze bust. *National Gallery of Art, Kress Collection*

Fig. 189 Pozzo: Entrance of S. Ignazio into Paradise, section, church of S. Ignazio, Rome. *Alinari*

Fig. 190 Caravaggio: Death of the Virgin, Louvre. *Alinari*

Fig. 191 Tiepolo: Cleopatra's Banquet, section, fresco, Palazzo Labia, Venice. *Bohm*

Fig. 192. Günther: Group of the Guard-
ian Angel, Burgersaal Church, Munich.
Hirmer

Fig. 193 Velázquez: The Maids of Honor
(*Las Meninas*), Prado. *Mas*

Fig. 195 Goya: La Ma...

Fig. 196 Montañes: The Virgin of the Immaculate Conception, polychrome wood Seville Cathedral. *Mas*

Fig 197 Rubens: Castor and Pollux Seizing the Daughters of Leucippus, Munich. *Courtesy Bavarian National Collection*

Fig. 199 Van Dyck: Queen Henrietta Maria with Her Dwarf. *National Gallery of Art, Kress Collection, 1952*

Fig. 198 Rubens: The Felt Hat. *Copyright National Gallery, London*

châteaux to another; accompanied by tapestries and furnishings. In several of his castles, he supported resident artists. A painted book might be started by one artist at Mehun-sur-Yèvre, where Beauneveu was active, and taken to Poitiers for Jacquemart de Hesdin to finish. The Romanesque illustrator worked for the Church and the glory of God, the Gothic book painter for the pleasure of a wealthy patron.

The Sienese painter Simone Martini came to Avignon in Provence (1339) to work for the papal court, which had taken up residence there (1309–1376). This contact of Sienese with French art contributed to the formation of a courtly style of art which became international but had its center in Burgundy. French miniature painting combined with Sienese painting in a cult of decorative splendor, a preference for slender figures, for garden and landscape settings and realistic court costumes, as in the work of the Limbourg brothers.

International Style. Each country had its own variation of the so-called International Style. Details are realistic and precise, as if seen in near view and in sharp focus; a strange mingling of the artificial and the real. One of its most attractive examples is a late fourteenth-century panel painting by an unknown artist, the celebrated *Wilton Diptych* (Fig. 124). Its miniaturelike delicacy and grace have earned it universal praise. On the left panel are King Richard II (kneeling), St. Edward the Confessor (with ring), St. Edmund, and St. John the Baptist. The Virgin holding the Child and surrounded by angels occupies the right panel. Sweetness and splendor are reflected from all participants; the supposedly rugged St. John the Baptist, in spite of his beard and disheveled hair, expresses the same blissful innocence as the attending angels. The Wilton Diptych has been attributed to France, Italy, Bohemia, and England. One inclines to the English attribution; it "looks" English. It is so proper and well mannered; no Lochner would have invented these well-groomed kingly saints.

A Bohemian version of the International Style (c. 1350) combines Sienese and Byzantine elements with motifs from Giotto in an original manner in a panel in the Berlin Museum. Stephan Lochner (d. 1451) represents the International Style in Cologne in the fifteenth century. One of the most attractive of his several altarpieces is his *Madonna in the Rose Arbor* (Fig. 125). His flavor of sweetness and splendor is German in character and less ethereal than the Wilton Diptych. The Madonna is seated in the midst of adoring and music-making cherubs under a rose arbor, as angels hold up a curtain to form the background. The Lord, not unlike a benevolent Santa Claus, looks down upon the

Gentile da Fabriano's *Adoration of the Magi* the procession
of the Wise Men could have taken place in Florence itself
on one of its feast days; the foreground is crowded with
kings in sparkling costumes and men on horseback, the pro-
cession wending its way through the background. This altar-
piece was painted in 1423 for the Strozzi Chapel in the
Church of Santa Trinita.

Pisanello (d. 1455) of Verona, a follower of Gentile da
Fabriano and well known as a medalist, demonstrated the
decorative character of the International Style. In a *Portrait
of a Lady*,[s] character is completely submerged in the empha-
sis on the linear quality of her profile, on ivorylike flesh
tints and on fashionable costumes and jewelry.

Having followed Sienese painting and the International
Style of Gothic painting in Italy down to the middle of the
fifteenth century, over a century after its beginning, we now
return to Florence and the period around 1300.

Giotto, the founder of the Florentine school, was more
progressive than Duccio, who stood at the end of a mil-
lennium of the Byzantine tradition. Giotto was an archaic
painter from the beginning of a new development which
continued into the painting of our own period. The whole
of fourteenth-century Italian painting was influenced by
Giotto, without advancing beyond the stage of development
he represented. Giotto's style is a figure style in which land-
scape functions only as a collection of symbols; individual
feeling is included, but there are no cast shadows. His
naturalism is not based on an objective study of nature, but
in part on the sculpture of Giovanni Pisano; he took sug-
gestions from nature, but did not work from the living
model. Giotto was an excellent composer, with dramatic
ability to bring out his story. He profited from ancient fres-
coes that were still in existence in Rome, which he visited
in 1300. He also learned from the best painters of his day,
from Cimabue in Florence and Cavallini in Rome. Giotto as
a progressive realist was readily accepted by his city. His
style, concrete and factual, may seem prosaic; his figures
belong to a sober workaday world. Such a matter-of-fact
spirit in art was compatible with the practicality of business.
The humanizing emotional approach of the Franciscans had
found artistic expression in Giotto's frescoes of the life of
St. Francis; the early ones are in the upper church of San
Francesco at Assisi and the later ones, at Santa Croce in
Florence.

Of the several series of frescoes painted by Giotto, the
most representative are the frescoes in the Arena Chapel,
Padua, commissioned by Enrico Scrovegni. As Enrico's fa-
ther, Reginaldo, had been a usurer and also appeared in hell

in Dante's *Divine Comedy*, the frescoes were probably meant as an act of expiation to restore honor to the family name.

Incidents from the story of Joachim and Anna, to whom eventually a child, Mary, the mother of Jesus, was born, are included in the Arena Chapel frescoes. The story is not Biblical, but a legend regarding the ancestors of Christ. In the part of the story here represented, Joachim had returned from the temple, where his offering had been refused because he was childless (Fig. 130). Rather than return home, where his humiliation was known, he sought refuge with his shepherds in the "desert places among the mountains." The scene is one of barren emptiness, the human actors stand near the foreground, as on a shallow stage. The old man, a bulky figure, stands listless with bowed head, while the shepherds wonder at their master's grief; the action is restrained, but Joachim's dejection is portrayed with deep insight. The sprightly dog makes Joachim seem all the more rigid.

Giotto's massive figures and rocky ledges look solid, as if carved out of the same material. The colors are tints of reds for drapery and of greens for rocks; there are no cast shadows, sheep are like toys, and trees are small clusters. A touchable world belongs to the childhood experiences of each one of us. It also belongs to man's early experience in painting, for Giotto may be said to represent the childhood of modern painting. Giotto neglected feet and drew hands and wrists too small, as beginners do; his knowledge of anatomy was slight.

The Fresco Technique. In Giotto's time and for at least two centuries after him, in wall decoration the painting was applied on the fresh plaster. This technique was called fresco, meaning "fresh." The powdered pigments were mixed with water and united chemically with the lime of the plaster, but had to be applied before the plaster had dried. All colors dried lighter than they appeared when wet, so that fresco painting kept the wall light in tone. The fresco technique was well suited to painting at this early stage; it aimed at broad effects, and had not yet matured sufficiently to worry about complexities and elaborations that the fresco medium could not have solved.

Practice of Painting. The painter considered himself a craftsman; he worked in a shop (*bottega*) and belonged to the guild of the druggists (*medici e speziale*) who made the colors he used. A painter, like an architect, worked only on commission; someone had to make a contract with . . . decorate a chapel in fresco or to paint a Madon . . . saint on a wooden panel in tempera. A master train . . . ants, who did much of the work; he designed the . . . panel and supervised its execution. Every large churc . . .

dozen or more altars which called for paintings, portrait, or a chapel illustrating the saint's life and m. In that respect, Florence was not different from other tian cities except in having civic pride and wealth abo average; hence she could well afford the expense of en many artists.

An Italian painter of the fourteenth century, Cennin. nini, has left us a contemporary source in his instr book on technical aspects of painting. Every step is fully explained in the manner of a craft. He advises always the best materials. "Even if you do not get paic and our Virgin will make it up to you in peace of min health of body." Some of Cennini's information seem turesque; he tells us that, for the faces of young peopl paint must be mixed with the yolk of an egg of hen, as it is lighter in color than that of a country which is good only for the faces of older persons Co gives us the proportions of a man, but not of a wo for he says: "There is not one of them perfectly portioned."

Crafts: Needlework, Wood, Ivory, and Gold. The continued to serve the church, but during the fifteenth tury secular uses achieved about equal importance. En and Florence excelled in pictorial needlework for altar choir mantles, the finest of which were made by artisa the cities rather than by nuns. Carving was applied to pe hests and cupboards, occasionally to chairs, and rely to tables. The ornamental forms developed in ecture were applied to utensils regardless of materials with due regard to quality, to materials and to the use o object; utility as well as beauty was important.

The fourteenth-century ciborium, a copper-gilt vessel hinged lid surmounted by a cross, was meant for kee and distributing the Sacred Host; its graceful shape re the stone finials of Gothic architecture. The decoration picting scenes from the life of Christ, is in blue-and enamel, filling in the background from which the copper been removed; hence this type of enamel is known as cl plevé. Limoges in France was a center of production copper-gilt enamel. (National Gallery of Art, C-3.)

A panel (Fig. 131) from a late Gothic carved ivory tych, perhaps made in Milan, has two hinged panels w open like a book. Each is like a sheet of lace, framed by bold designs of the inlaid certosina borders, so called Certosa, a monastery near Pavia, which was known fo inlay work. Such diptychs served the devotional needs o individual. The larger compositions illustrate the life Christ from the Nativity to the Marys at the Tomb;

apostles are in the center, and angels are on the margins. The pierced background is blue and gilt, and there are gilt halos and crowns. Heads are raised or turned to suggest expression, the hands of the kings really hold their gifts, features are indicated, and the drapery is deeply carved in overlapping folds. The ivory is cut to threadlike thinness, but the action is clear, particularly in the angels in the side niches playing musical instruments.

A Late Gothic morse, a gold and enamel clasp with which ecclesiastics fastened the cope, represents the *Trinity* (Fig. 132); it is a masterpiece of the art of a Burgundian or French goldsmith around 1400. The love for realistic details is shown in the finely modeled head of God the Father with His wrinkled forehead, in the emaciated Christ, and in the twisted leaves of the pearl border; though of a bewildering richness, the workmanship is astonishingly precise. This is the naturalism of the early fifteenth century which, in stone sculpture, produced the *Well of Moses* at Champmol near Dijon (Fig. 111).

Opaque and translucent enamels, gold, and pearls provide a contrast of color; in the costliest materials, several techniques are combined. The medallion of the *Trinity* is embossed; sheets of gold are hammered and tooled into shape and covered with colored translucent enamel. Applied work is used in the several leaf borders, and chasing wherever there are depressed lines, as in the narrow bands separating the wider borders. Chasing differs from engraving in that lines are incised without removing any metal.

Conclusion. Gothic art brought the trends of northern Europe to a brilliant climax. The classic traditions of the south were absorbed in a new and original style, based in part on inspiration from nature. Through the church and monastic orders, the Gothic style was spread throughout Europe. Architecture tended to unify the arts, impress its form on other materials, and minimize national differences. Architecture, sculpture, and painting were often practiced by the same artist. The actual performance depended on craftsmanship, but the selection and planning of the subject matter were determined by the commissioner, usually the church. The interpretation followed traditions which the artist accepted willingly. In the later Gothic, the religious appeal tended to merge with an aristocratic emphasis, as in painting of the International Style, and with a r   approach in the Florentine school in such painter   o
and Ambrogio Lorenzetti. In architecture, stain tapestries, the Gothic set standards that have be acclaimed.

dozen or more altars which called for paintings, a small portrait, or a chapel illustrating the saint's life and miracles. In that respect, Florence was not different from other Christian cities except in having civic pride and wealth above the average; hence she could well afford the expense of engaging many artists.

An Italian painter of the fourteenth century, Cennino Cennini, has left us a contemporary source in his instruction book on technical aspects of painting. Every step is carefully explained in the manner of a craft. He advises to use always the best materials; "Even if you do not get paid, God and our Virgin will make it up to you in peace of mind and health of body." Some of Cennini's information seems picturesque; he tells us that, for the faces of young people, the paint must be mixed with the yolk of an egg of a city hen, as it is lighter in color than that of a country hen, which is good only for the faces of older persons. Cennini gives us the proportions of a man, but not of a woman, for he says: "There is not one of them perfectly proportioned."

Crafts: Needlework, Wood, Ivory, and Gold. The crafts continued to serve the church, but during the fifteenth century secular uses achieved about equal importance. England and Florence excelled in pictorial needlework for altars and choir mantles, the finest of which were made by artisans in cities rather than by nuns. Carving was applied to paneled walls and cupboards, occasionally to chairs, and more rarely to tables. The ornamental forms developed in architecture were applied to utensils regardless of materials, but with due regard to quality, to materials and to the use of the object; utility as well as beauty was important.

The fourteenth-century ciborium, a copper-gilt vessel with hinged lid surmounted by a cross, was meant for keeping and distributing the Sacred Host; its graceful shape recalls the stone finials of Gothic architecture. The decoration, depicting scenes from the life of Christ, is in blue-and-red enamel, filling in the background from which the copper has been removed; hence this type of enamel is known as champlevé. Limoges in France was a center of production of copper-gilt enamel. (National Gallery of Art, C-3.)

A panel (Fig. 131) from a late Gothic carved ivory diptych, perhaps made in Milan, has two hinged panels which open like a book. Each is like a sheet of lace, framed by the bold designs of the inlaid certosina borders, so called after Certosa, a monastery near Pavia, which was known for its inlay work. Such diptychs served the devotional needs of an individual. The larger compositions illustrate the life of Christ from the Nativity to the Marys at the Tomb; the

but has disintegrated due to the dampness of the climate. Van Mander says the Van Eycks "invented" oil painting; actually painters in the fourteenth century had used oil, but they had failed to produce outstanding works of art in that medium. Oil had been used as a medium in painting draperies, but not flesh colors. The exact methods used by the Van Eycks are not known; their so-called oil technique, which was probably an oil-tempera technique, continued in use until it was replaced by the technique of Rubens. In the oil technique, light penetrates the surface and is reflected from whatever layers beneath have opaque pigments. This gives a suggestion of depth and, in addition, in the middle values, a greater intensity of color.

The Style of the Van Eycks. Through the oil technique, a sense of natural illumination was achieved, though as yet without a full visual effect. A love of detail emphasized differences of textures and produced effects that in sharp definition seem microscopic, beyond the facts of actual appearances as seen in nature. The figure was individualized and portraiture became one of the triumphs of the style, but drawing remained hard, stiff, and angular.

The "Modes" of Painting. A system of differentiating styles in painting was developed by Denman Ross and Arthur Pope. As defined by this system, Van Eyck used the "mode of relief," which deals arbitrarily with facts of vision found in nature. In place of a consistent illumination, as we become aware of it when confronted by nature, the lights and darks are varied to suggest relief, but without denying the flat surface of panel or canvas. Virtually all painting that we have dealt with so far and much that is before us belongs to this "mode of relief" type, unless it belongs to the simplest of all modes, the "mode of line and flat tone," as illustrated in Greek vase painting. The next level, the "Venetian mode," we shall deal with presently, and the "mode of full visual effect" was accomplished in some paintings of Van Eyck's and particularly in Vermeer's paintings in the seventeenth century.

Jan van Eyck's *Annunciation* (Fig. 133) is a sober interpretation of the appearance of the angel to the Virgin. The angel's massive cope, weighted down with a jeweled border and a huge morse or clasp, in its hard, metallic quality is unmatched by anything else in the painting. The stool serves to set the Virgin back into space, the lilies are like wax, and a book before the Virgin appears as if seen through a magnifying glass. The figures and the foreground are in full visual effect, whereas the background is in the mode of relief. Space is not continuous; the background is

Renaissance Art:

1400 - 1600

The term "Renaissance" means rebirth of the art of classic antiquity. Strictly speaking, the Renaissance might be more correctly dated 1400–1520. but we have included mannerism, or eclecticism, much of Michelangelo, and of the Venetian School. Vasari first applied the term Renaissance to the art of Cimabue. Renaissance art was primarily the art of Italy, though it spread to other countries and was most successfully adapted in France. Netherlandish painting of the fifteenth century, concurrent with the Early Renaissance in Italy, deoped independently, except for minor influences of one intry on the other.

Netherlandish Painting of the Fifteenth Century. In the ifteenth century, the Low Countries. the Holland and Belgium of today, were united. We speak of Flemish artists. though most of them did not come from Flanders. but from one or another of the other provinces and duchies. In painting, the Netherlands was second only to Italy, and in some respects was Italy's equal or superior. The Vasari of the Netherlands is the biographer Carel van Mander, who wrote in 1604; the leading modern critic was Max J. Friedländer.

The outstanding painters of the fifteenth century, contemporary with Masaccio in Italy, were Hubert and Jan van Eyck, with whom, Van Mander says, "Netherlandish painting began." There are no precedents for the quality of the well-known and often-discussed and illustrated *Ghent altarpiece,* the great early work of the Van Eyck brothers, but Jan, who outlived Hubert, left other works.

· *The Van Eyck Technique.* Netherlandish painting developed out of miniature painting. It used oil as the medium on oak panels covered with gesso. Fresco painting existed,

but has disintegrated due to the dampness of the climate. Van Mander says the Van Eycks "invented" oil painting; actually painters in the fourteenth century had used oil, but they had failed to produce outstanding works of art in that medium. Oil had been used as a medium in painting draperies, but not flesh colors. The exact methods used by the Van Eycks are not known; their so-called oil technique, which was probably an oil-tempera technique, continued in use until it was replaced by the technique of Rubens. In the oil technique, light penetrates the surface and is reflected from whatever layers beneath have opaque pigments. This gives a suggestion of depth and, in addition, in the middle values, a greater intensity of color.

The Style of the Van Eycks. Through the oil technique, a sense of natural illumination was achieved, though as yet without a full visual effect. A love of detail emphasized differences of textures and produced effects that in sharp definition seem microscopic, beyond the facts of actual appearances as seen in nature. The figure was individualized and portraiture became one of the triumphs of the style, but drawing remained hard, stiff, and angular.

The "Modes" of Painting. A system of differentiating styles in painting was developed by Denman Ross and Arthur Pope. As defined by this system, Van Eyck used the "mode of relief," which deals arbitrarily with facts of vision found in nature. In place of a consistent illumination, as we become aware of it when confronted by nature, the lights and darks are varied to suggest relief, but without denying the flat surface of panel or canvas. Virtually all painting that we have dealt with so far and much that is before us belong to this "mode of relief" type, unless it belongs to the simplest of all modes, the "mode of line and flat tone" ___ ___ in Greek vase painting. The next level, the "mode of ___ we shall deal with presently, and the "mode of ___ effect" was accomplished in some manner ___ and particularly ___

attached to the foreground, it does not flow out of it. The linear perspective is inaccurate, but painting attains a superreality in objects represented as if in near view. Yet, in Van Eyck's world of facts, details also have a religious meaning. In the pictorial floor tiles, Samson pulls down the temple and David kills Goliath to save the Jewish people; both incidents are symbols of the salvation of mankind by Christ. The three windows in the back, which look so much like real glass, symbolize the Trinity; a dove above the Virgin's head symbolizes the Holy Spirit.[9] The angel wears a crown and carries a scepter, emblems of royalty referring to the future king of the world. Van Eyck's *Giovanni Arnolfini and His Wife* (Fig. 134), dated 1434, commemorates a marriage ceremony, indicated by the joining of hands, by the raising of the man's right forearm, and by the single burning candle in the chandelier, indicating the presence of God (Erwin Panofsky, 1953). Marriage could be entered into by a couple without a priest. The marvelous precision of detail is strikingly illustrated in the chandelier, the mirror reflecting the couple from the back, the leaded glass window, the wooden clogs, and the dog, symbol of fidelity. Illumination from front and rear defines form and suggests space and comes close to achieving a consistent visual effect. The *Van der Paele altarpiece* at Bruges is extraordinary in its detailed splendor, and its insistence on effects of texture. The *Madonna with Chancellor Rolin* (Louvre) is reticent and impressive in its all-pervading atmosphere of serene tranquillity and heavenly votion. Attention is drawn to the Christ Child, but an effect of spaciousness unites the open loggia with the Meuse River, the city Liége, and the distant mountains (Lejeune, 1956). Van Eyck had no equals though Petrus Christus in Bruges should be mentioned. All Flemish painters emphasize detail, but Van Eyck's successors also portray sentiment.

Rogier van der Weyden, the best known painter of Tournai and Brussels, was more influential than Jan van Eyck. Rogier was trained at Tournai in the School of Robert Campin, known as the Master of Flémalle (d. 1444). Campin had been forgotten until works, such as a triptych (*Mérode altar*) now at the Cloisters of the Metropolitan Museum of Art and two side panels in the Prado Museum (*Weil altar*, 1438), were rediscovered by Hulin de Loo. Both represent well-furnished Gothic middle-class interiors with figures placed in the foreground; the rooms recede to the rear in sharply converging lines, distorted as on a photograph taken with a wide-angle lens. Rogier van der Weyden's *Descent from the Cross* (Prado), painted in the manner of a carved altarpiece, skillfully arranges the ten figures with restrained

expressions of grief in a tightly packed composition. The panel constituted an admired and often-copied landmark of northern painting. The *Bladelin altar*, 1452 (Berlin) is named after the donor who founded the town of Middleburg, presumably represented in the background of the central panel showing the *Nativity* (Fig. 135). The ruined shed with its lone column referring to the column of the Passion on which Christ was flogged, the adoring angels, and the background are forced into a pictorial unity which lacks spatial continuity. Religious symbolism identified the ox with the New Testament and the ass (in the background and not visible in most reproductions) with the Old Testament. In the left panel of the *St. John altarpiece* (Berlin), the infant St. John is brought by St. Elizabeth to his father. It was painted perhaps after Rogier's return from Italy. Space extends backward in a less abrupt, more natural manner. In Van der Weyden's *Portrait of a Lady* (National Gallery of Art), we see the details almost before we see the picture, as if the total impression had to be gathered in piecemeal. The hands are all fingers, bunched together so tightly that they lose the human character and look more like vegetables. Drawn with precision, the veil allows forehead, hair, and ear to show through. Compared to Van Eyck's style, Rogier van der Weyden's is flat and linear.

Dierik Bouts from Holland had a style resembling Rogier's but more rigid. His *Last Supper* represents the event as he had seen it dramatized in the mystery plays. It is exquisite craftsmanship, but placid and without expression. The scene is frozen in a vein of harsh realism that has cast shadows but no atmosphere.

Hugo van der Goes (1440?–1482) painted the *Adoration of the Shepherds* for Tommaso Portinari, the Medici agent in Bruges (Fig. 136). In a novel interpretation, Hugo introduced three groups of adoring angels, as well as a group of shepherds. Each shepherd is an individual portrait and registers prayerful devotion, loving sympathy, or startled curiosity in his own way. They are characterized as rugged, even uncouth, persons from the lower classes, intended to contrast with the saints and angels. Though of lowly origin, the shepherds too are deserving of salvation; the sincerity of their facial expression atones for their rough appearance. The emaciated appearance of the Christ Child in Netherlandish painting deliberately emphasizes helplessness. The Portinari family is represented on the side panels.

Rogier's most famous pupil was Hans Memling of Bruges (d. 1494). Memling's style is best in repose. His childlike innocence, soft modeling, and smooth, enamel-like tones

suggest the Rhenish style of his German youth; his slender figures are taken from Rogier. In the *Madonna and Child with Angels* (Fig. 137) a gentle religious ceremony takes place; the angels attend the Mother and Child like ladies-in-waiting surrounding a princess. A mystic prophecy is being revealed in a mood that is playful and serious at the same time. One angel holds out the apple that symbolizes Adam and Eve's disobedience. Grapes, the symbol of the wine of the sacrament, appear in the carved border of the arch. The apple and grapes suggest the fall and redemption. The Child reaches for the apple and his finger points to the open book, to the passage foretelling the coming of the Messiah. The Virgin was idealized, her ethereal expression revealing her spiritual qualities. In the decorations of the stone arch, King David with his harp and Saint Simon the Apostle, opposite, awaken and lift their hands in wonder; cupids in the capitals watch the ceremony below. In each spandrel, an angel holds up a globe, the world over which Christ is to rule. This is a quiet celebration that starts the Infant Jesus on His mission to save mankind. The music-making angels symbolize the music of the spheres, for it was believed that the heavenly bodies in motion created harmonious sounds. Shakespeare, in *The Merchant of Venice* (Act V, Scene 1), refers to this celestial music: "There's not the smallest orb which thou beholds't But in his motion like an angel sings . . ." Devotion and art are closely interwoven; the figures are related to the lines of the architectural background, the angels' wings out in front of or behind the arches, depending on the position they occupy in space, and major sections, like the heads, are firmly set into the pattern. The panel was perhaps intended for the private chapel of a Flemish nobleman. The castle in the background with moat and drawbridge could be his ancestral estate.

After Memling, Gerard David became the leading painter of Bruges; his figures are solid and he does not have Memling's sentiment. David was a conservative painter who was rediscovered in the nineteenth century. His *Rest on the Flight into Egypt* (Fig. 138), has harmonious color, delicate drawing, unified space, and a meditative mood. Soft blues stand against grayed tans in the foreground and sky. The tunic under the blue mantle is accented in red. The flesh tints of the child show through a gauzelike material. Note the mother's hand and the child's knee and his small feet with toes pointing in different directions. The outer mantle, spread out over the ledge, forms a veritable still life of folds breaking horizontally and vertically. The woven basket, the grasses and ferns in the foreground, show the desire of the artist to

do his utmost in a loving and painstaking study of every detail. Nature is neat and orderly; individual plants appear as silhouettes in the immediate foreground. Joseph, in the middle distance, is knocking nuts off a tree with his staff. The Middle Ages had ignored the visual world as unimportant, but now it was conceded, in the Netherlands as in Italy, that the world was also a manifestation of the divine. Rocks, water, and hills were no longer represented as stage props, but as parts of the natural environment, though the Virgin and Child continued to be the important elements in the landscape.

The Cultural Background of the Italian Renaissance. With the beginning of the fifteenth century, stylistic changes in art took on greater significance, and as an expression of individualism in art, the trend has continued ever since. Styles, like handwriting, became differentiated in subtle ways, so that a fifteenth-century Italian painting is datable almost to the decade. Before the Renaissance such comparatively rapid changes of style had been characteristic chiefly of ancient Greek art; now Italy took its place with Greece in producing some of the greatest works of Western art. We may ask ourselves what brought on such a spectacular development of art and to what extent was this due to the culture.

The individuality of the Renaissance artist appears as a novelty, at least since the days of classical antiquity, as little is known about the medieval artist. The Renaissance may be said to extend back to 1300, when the tendencies that matured after 1400 began. The styles of Giotto, Masaccio, and Michelangelo mark stages of development; each one determined the stylistic trend of at least a century. It was the personal genius of such artists as Leonardo or Michelangelo that provided the energy which drove these artists to creation. Technical skill was but one aspect of their endowment, and skill was often shared with others who lacked genius. Religion, patrons, humanistic learning, and the society in which the artist lived affected the art.

Religion as a Source of Inspiration. It is noteworthy that the Renaissance proper, which virtually ended with the Reformation (1517), also produced some of the noblest works of religious art, like Michelangelo's Sistine ceiling. Raphael's Madonnas, some of Durer's woodcuts and such consuming spirit painters as Fra Angelico and Grünewald. The unity of spirit that characterized the art of the thirteenth century gave way to considerable variety, though differ— interpretation still reflected the accepted dogmas in the deeply humanizing tendency which incre of the artist constituted a common bo

Renaissance architecture and sculpture also remained dedicated to religion, though with less fervor. Except for St. Peter's, Renaissance churches hardly compare with Gothic cathedrals, and the most impressive sculptural monuments were tombs and memorials of no religious significance.

Patrons. What seemingly differentiated the cities of the Renaissance from our own was a comparatively high demand for art. At one and the same time, there were 84 wood carvers and 70 butchers in Florence (Wackernagel, quoted by Arnold Hauser). However, other facts tend to correct this impression of a high-level art culture widely supported and popularly encouraged. From other information it appears that probably few of the 84 wood carvers were important as artists. Not only the princes of the Church, but also the ruling courts, the communal governments and the heads of foreign states supported the leading artists. Ludovico, 'Il Moro, Duke of Milan and later Francis I, King of France, employed Leonardo. Sigismondo Malatesta, the notorious despot of Rimini, employed Piero della Francesca; and Ludovico Gonzaga, a "petty prince" of Mantua, employed Mantegna; but the most distinguished of all Renaissance patrons were the Medici in Florence.

From 1400–1743, throughout thirteen generations, the members of the Medici family were the most illustrious patrons of art, of learning, and of science in modern history. Eventually the last member of the family bequeathed to the state the family collection, the present-day treasures of the galleries of Florence. Lorenzo the Magnificent employed virtually all the great artists of his day; Verrocchio, Botticelli, Bertoldo, and Michelangelo were his special favorites. Finally, the governments of cities like Siena, Orvieto, Florence, and Venice used artists on public works.

The Social Status of the Artist. During the fifteenth century, the Italian artist was neither a man of means nor a member of the proletariat. He fitted into the economy at a comfortable level. Toward the end of the fifteenth century and during the sixteenth century, the artists' economic status rose. Filippino Lippi became wealthy, Perugino owned houses, Leonardo (while in France), Raphael, and Titian had considerable incomes and lived lordly lives. Toward the end of his life, Michelangelo was sufficiently wealthy to accept no payment for his work on St. Peter's.

Humanistic Learning. The interest in classical antiquity was aroused by the humanists. These literati, members of the intelligentsia, scholars, poets, linguists and, on occasion, artists like Alberti, set the fashion for things classical. They drew support from the state or depended on private gentle-

men who kept humanists attached to their households for their intellectual stimulation. Even where the subject matter was ostensibly religious, an interest in classical learning was often involved. Architecture revived Roman vaults and the classical orders, sculpture concentrated on the study of the figure inspired by excavated classical statues, and painting included such classical subjects as Botticelli's *Birth of Venus*, Mantegna's *Triumph of Caesar*, and Raphael's *School of Athens*.

An Economic Interpretation of Renaissance Art. To an extent this preoccupation with the past made that section of art the private preserve of those who had the education to appreciate the setting. Whatever was painted for private palaces hardly benefited the general public. Some doubt has been cast on the idea that the whole populace was art conscious, as expressed in a report that all Florence was enthusiastic about the plan for a cathedral dome (Arnold Hauser). An economic interpretation of the art of the Renaissance may find support in the fact that the International Style was a court style. Giotto, with his glorification of Saint Francis, might have been favored by those who possessed no property, as Saint Francis had married himself to Poverty. Ghirlandaio's way of representing saints made him, according to Heinrich Wölfflin, a good bourgeois, a representative of the middle-class culture. The greater reserve of the High Renaissance style in contrast to the too familiar mingling of the people with the saints in Early Renaissance paintings, according to one interpretation, would indicate a desire to remain aloof from the populace on the part of an exclusive social elite (Von Martin).

Individualism. The striving for knowledge paralleled a spirit of enterprise, which had created a middle class based on commerce and which spread to politics. The power of money of the upper guilds prevailed against the feudal aristocracy and an emphasis on reason invaded the arts; the artist became engineer and scientist. Brunelleschi, an architect and sculptor, solved an engineering problem in the dome of the cathedral of Florence, and the laws of perspective intrigued among others Uccello. The supreme example of the merging of art with science was Leonardo. The worship of the expert gave rise to the discovery of the man of genius, as exemplified in Michelangelo. Art became the creation of an aristocratic personality, and originality, unknown to the Middle Ages, became a virtue. As religion lost its supreme control over various aspects of spiritual life, art became an autonomous expression in its own right. Art continued to serve the purposes of faith, but was judged from the stand-

point of art. Unlike medieval art, which meant to elevate man, Renaissance art was to enrich life and delight man.

Italian Painting of the Early Renaissance; the Grammar of Art. Italian painting during the fifteenth century developed four tendencies, each of which dominated the work of the painters of this period: The international, continued from the Gothic, the monumental, scientific, and devotional. Masaccio represented the monumental tendency, and Uccello, Pollaiuolo, Signorelli, Piero della Francesca, and Perugino, the scientific. Painters of the devotional group—the sentimental, narrative, and pageant painters—were Fra Angelico, Fra Filippo Lippi, Benozzo Gozzoli, Ghirlandaio and Botticelli. Artists decorated a wall or the furnishings of a church or palace with a subject not of their own choice. Originality was encouraged to find a new way to express a religious or classical subject, represented as if it were contemporary with the artists' own period. Local styles developed, the Florentine, Umbrian, North Italian and Venetian being the most important. The period of Italian art from 1400 to 1500 laid the foundation for drawing and painting for all subsequent periods, including our own. It concerned itself with such problems as anatomy, composition, perspective, and representation of space, and created what might be called a grammar of visual expression.

Character of Style in Painting. In the "mode of relief" the modeling is shallow and cast shadows are few. There is no real depth, and atmospheric effects are absent; perspective is linear, and drawing is by outline rather than by brush strokes. The primary and secondary colors were used. A kind of realism emphasized isolated objects in sharp outline. Painting was more for surface decoration than in imitation of nature. True, or buono, fresco was used for walls, tempera for panels; oil was gradually adopted, especially by the Venetian School.

The outstanding painter in Florence at the beginning was Masaccio. He set the standard of monumental form and consistent illumination and he softened the contours, enveloping his figures in atmosphere. His use of broad contrasts of light and shade is illustrated in *The Expulsion of Adam and Eve* (Fig. 140), from his frescoes in the Brancacci Chapel of the Carmine Church. His fame rests on these frescoes, which became the inspiration for all painters of the Early Renaissance. Though he died at the age of twenty-seven, he revolutionized Italian painting. In his *Madonna and Child with Four Angels* (London, National Gallery), the heavy-set figure replaces the elongated Gothic type. The elliptical shape of the halo in this painting illustrates the scientific interest of

the times. Masaccio's name, which means "bulky or raw-boned," describes his style.

Masolino, Masaccio's teacher, was essentially a fresco painter of the International Style. A panel of the *Annunciation* (National Gallery of Art), representing an interior of gaily decorated architecture, shows that Masolino was more interested in making the walls seem precious than real. His figures are like manikins, with hands like stuffed kid gloves and doll-like heads.

Fra Angelico, a protégé of the Medici, represents a link between the Gothic and the Renaissance. In *The Death and Assumption of the Virgin* (Gardner Museum, Boston), the conservative medieval spirit lives on in the ornamental design and in his feeling for line. In the rendering of the anatomy, as in such details as the lightly veiled Christ Child, however, Fra Angelico became progressive as his style matured. Fra Angelico, a monk, was one of the most intensely religious painters of the Renaissance. The types he invented reflect the bliss and contentment of an inner peace, and his colors are fresh and pure. Vasari tells us that Fra Angelico wept when he painted the crucifixion. However deeply he may have been moved, Fra Angelico was limited in his power to express emotion (Fig. 139).

In the small panel of *Saint John in the Desert* (National Gallery of Art), Domenico Veneziano seized upon the moment when the saint takes off his rich clothes and puts on the coat of camel's hair. The painter used this subject to present a well-shaped figure—more like an athlete than a saint—though the Biblical story says nothing about this change of costume. The figure stands in a rugged and deserted spot under a blue sky. Though Veneziano shows no firsthand acquaintance with the desert, he has improved upon Duccio's version of rocky ledges.

Paolo Uccello is particularly known for his effects of fore-shortening in three battle pictures painted for Medici palaces. The figures in their squared, simplified form seem static; to emphasize depth, lances of the horsemen are pointed toward the spectator.

Andrea del Castagno (1390–1437) painted *The Youthful David* (National Gallery of Art) on a tournament shield. The posture is an adaptation from classic sculpture, like a combination of the action of the Apollo of Belvedere and the Artemis of Versailles. Goliath's head is shown resting between David's feet. Drapery folds are deep and the muscles of arms and legs stand out.

In a similar vein a *Portrait of a Man* (Fig. 141), probably by Andrea del Castagno, exemplifies line and form, which are the special province of Florentine art. The folds emphasize

form; the hand, placed in one corner, calls attention to the expanse of the chest; the arms, cut off by the picture frame, make it seem as though the space is not large enough to contain so much energy. The engraving of the *Battle of the Nudes* (Ill. 117) by Antonio Pollaiuolo, has an intensity of expression in addition to its decorative quality. In the fierce hacking and stabbing, the artist shows off his knowledge of anatomy. Piero della Francesca (*c.* 1410–1492) developed an impersonal and forceful fresco style of solid and fully rounded form. His frescoes in Arezzo (*The Legend of the True Cross*) suggest the monumental character of the Giotto-Masaccio tradition in a later and more elegant version.

The nude figure in convincing movement and perfect anatomy found its greatest exponent before Michelangelo in Luca Signorelli's (*c.* 1441–1523) frescoes. In his *Last Judgment* (Orvieto Cathedral), in the plunge of the damned, figures fall headlong as bodies pile up in a solid wall. Andrea Mantegna (1437–1502), the leading artist in North Italy during the second half of the fifteenth century, created a style of archaeological classicism combined with realism that aimed at an illusionistic effect of depth, based on linear perspective. The actual carved columns of the frame on his altarpiece at San Zeno are continued in a painted open loggia of the altarpiece itself. Antonello da Messina shares with these painters an unemotional objective style that stresses form. Having acquired a knowledge of the oil technique in Sicily through northern painters visiting there, he carried this influence to Lombardy and Venice.

Venetian Painting before Titian. This contributed to the practice of oil painting by Giovanni Bellini (*c.* 1430–1516) of the Venetian School. In his *Madonna with Saints* (Fig. 142) in triptych form, Bellini used Mantegna's scheme of continuing the carved frame into the painted architecture of the niche in which the seated Virgin is placed on a pedestal. His is a stately type of Madonna, conceived in the grand style of fully rounded form (1488), before this type had become general in Florence. In his *Feast of the Gods* (National Gallery of Art), signed and dated 1514, the setting sun engulfs the scene so that the costumes glow in a soft light and darker figures are swallowed in a murky mist. The intermingling of hues and the variations in the tints determine the color effect. (The technical problem of Titian's collaboration on this painting has recently been analyzed in detail by John Walker.) The painting illustrates the story, based on Ovid, of the God of Fertility, Priapus, making advances to Vesta, Goddess of Chastity. Vittore Carpaccio dealt with the *Legend of St. Ursula* in a narrative spirit of pageantry. At the transi-

tion to the High Renaissance Giorgione (1478–1510) took over Leonardo's soft style and infused his subjects with a mood of dreamy reverie. His *Madonna Enthroned between St. George and St. Francis* at Castelfranco, where he was born, was painted in oil on wood when he was twenty-six years old. The sense of atmosphere, depth and tranquillity creates a new note in Italian painting. His *Sleeping Venus* (Fig. 143), an oil painting on canvas, was the first of a type that was perpetuated by Titian and others. Figures and landscape in sweeping lines are beautifully related, as if "poured out" (Lucretius). Titian added the landscape and a cupid, now painted over, to the canvas left unfinished by Giorgione. Giorgione was also a musician; his *Concert* (Pitti), an oil painting on canvas which may be partly by Titian, shows the effect of music upon the performers. The dreamy self-absorbed expressions in the faces of the cleric and the woman singer contrast with the ardent melancholy of the player at the keyboard. Though the *Pastoral Symphony* (Louvre) has been repainted, Giorgione's poetic mood is felt. We do not know the story that is here told, and the sole content may be in the contrasting effect of clothed and nude figures in a lush landscape setting. In the *Nativity* (National Gallery of Art), there is an air of solemnity as two shepherds kneel with courtly reverence before the Christ Child. Landscape, shepherds, and design suggest Giorgione as influenced by Leonardo.

The Sentimental Trend in Florentine Painting. Fra Filippo Lippi (*c.* 1406–1469) represents this trend. He led a far from exemplary life; his love affair and elopement with a nun, Lucrezia Buti, helped to earn him a bad reputation, and for a time he lost his Papal stipend. In his *Madonna Adoring the Child* (Fig. 144), the youthful mother kneels before the Child against a deep forest background; the dove and God the Father are above. This graceful type of "Mystery Madonna" in all its lightness and delicacy is his own invention. The voluminous drapery breaks in large folds, massive in contrast to the girlish figure.

Botticelli (1446–1510) was the most celebrated of the early Florentine painters and one of the great artists of all times. The interest in his work is worldwide; one of the best books on Botticelli is by a Japanese scholar, Yukio Yashiro. Botticelli learned from his master, Fra Filippo Lippi; he was influenced by Antonio Pollaiuolo, and he may also have worked with Verrocchio. His frescoes are among those on the walls of the Sistine Chapel, but he is better known for his tempera panels. No other Western artist equals Botticelli in the beauty of his linear decoration. In his *Adoration of the Magi* (Na-

tional Gallery of Art), the persons in the foreground kneel or show their reverence. Heads are thrust forward and eyebrows lifted; hands are folded in prayer, laid across the chest, or making the sign of the cross. Botticelli, classed with the sentimental-devotional group, also learned from the scientists. He occasionally disregarded the proper construction of figures, but he knew how to draw correctly and beautifully. Heinrich Wölfflin calls attention to Botticelli's figures, which touch the ground so lightly that they seem to be floating. Botticelli's individuality may be seen in a *Portrait of a Youth;* the features are calm, with a touch of melancholy and wistfulness and an almost feminine delicacy which only Botticelli has. This may be an idealized head, a pictorial daydream into which Botticelli projected something of himself. Botticelli's heads often show a prominent chin, high cheeks, and wavy hair in heavy clusters; hands are long, fingers, bony and thick at the joint (Fig. 145). Botticelli's reputation was based on an earlier version of the *Adoration of the Magi* (Uffizi), because it contained portraits of the Medici in the figures of the Magi. His *Allegory of Spring* is one of his most original inventions, in which Spring scatters roses and the Graces strike languid poses as Mercury chases away the mist. Venus, Goddess of Love, in a bower of rose trees, welcomes the coming of Spring. Related in subject is the *Birth of Venus* (Fig. 146), inspired by a poem by Poliziano. The figure of Venus with her heavy tresses floating in the wind is one of the memorable creations of the Renaissance (Fig. 150).

Domenico Ghirlandaio (1449–1494) was the interpreter of the local Florentine scene in its interiors, its furnishings and costumes. He worked in fresco and also painted altarpieces. One of his best-known frescoes is the *Birth of St. John,* among those he painted for the church of Santa Maria Novella. A young woman of the Tornabuoni family, who commissioned the frescoes, stands with two attendants in the focus of attention. Among his panel paintings are some excellent portraits, including the *Giovanna degli Albizzi* (1488).

Benozzo Gozzoli (1420–1498) painted the frescoes of the *Journey of the Magi* in 1469 for the private chapel of Cosimo de' Medici (Medici-Riccardi Palace), for which Fra Filippo Lippi had painted his *Madonna Adoring the Child* (Fig. 144). On three walls of the chapel the splendid cavalcade making its way over a mountainous road is a decoration in the manner of tapestries. The gorgeous pageant has retained its color and gilt.

Filippino Lippi, son of Fra Filippo and Lucrezia Buti and pupil of his father and Botticelli, completed Masaccio's frescoes. He continued in the fifteenth-century tradition on fres-

coes and altarpieces at a time when Leonardo was active. Piero di Cosimo (1462–1521), a contemporary of Raphael's, represents the transition to the High Renaissance style. He was influenced by Leonardo, and became a master in horizontal panels, as in the *Death of Procris* (London), a painting for a chest (*cassone*). He is distinguished by his landscapes, in which the vaporous distance has an oriental effect; he approaches Botticelli in originality.

Italian Painting of the High Renaissance. Leonardo da Vinci (1452–1519) was born in the village of Vinci, his real name being Leonardo. He was primarily an engineer and a scientist. He made original discoveries in many fields, but above all he thought it important to collect knowledge. He painted little, and was always dissatisfied with his achievements, yet his paintings represent the culmination of the scientific and the sentimental tendencies. He used the pyramidal form of composition, developed the greatest subtlety in modeling, and became the most brilliant draftsman of the Renaissance. Leonardo used both hands for painting, but his drawings and manuscripts were done with his left.

In his oil painting entitled *Madonna of the Rocks (c. 1482)*, the sixteenth-century (cinquecento) style of the High Renaissance is foreshadowed in the manner by which hard edges are softened in what is called *sfumato* (dissolved). The fantastic grotto landscape has the minute detail of the studies of a geologist or botanist and is more in the fifteenth-century (quattrocento) style. Age has darkened the colors; originally the flowers were brighter. According to Leonardo, "chiaroscuro united to foreshortening constitutes the greatest achievement of painting," and "children should be expressed by softness and plump roundness and dimpling" *(Treatise on Painting)*. The Madonna's outstretched hand accentuates the third dimension, and the well-modeled figures are placed within space. The expressive features, delicate and serious, yet smiling,[10] are Leonardo's most personal creations (Fig. 151). Another version in London is believed by some scholars to be the original, but there is no unanimity of opinion.

The Last Supper, painted in tempera on the plaster walls of the refectory of Santa Maria della Grazie (Milan), was finished in 1498, after eleven years of work. Today only the composition can be appreciated (Fig. 147), as the painting began to deteriorate early; even in Vasari's day it was in ruin. Leonardo selected as his subject the moment when Christ said, "One of you shall betray me," developing the theme from a psychological point of view. The quiet expression of Christ reflects his inner poise. As little is known about the

disciples, Leonardo had to invent a character for each one. Peter, demanding an explanation, leans toward John, who sits on the right of Christ clutching a knife. Thomas, on the left of Christ, lifts a finger as if to emphasize one idea: "Who can it be?" James throws himself back in amazement. Philip, pointing to himself, seems to say, "It is not I," and Judas, with a bag of money, pulls back, upsetting the salt cellar. Andrew, hotheaded, lifts both hands indignantly, "I will not have it, it is not I." James, brother of Christ, calms Andrew. Matthew (at end) rises to listen, and John, nearest to Christ, is overwhelmed with sorrow. Leonardo here follows his own advice in the *Treatise:* "The expression of the face must be varied according to the emotional state of the person." "All limbs and attitudes must correspond to the expression of the emotion of the faces" (Osvald Sirén). *The Last Supper* was Leonardo's supreme masterpiece; it won him his place among the great artists, and became a landmark in painting. His *Mona Lisa*, with her animated brown eyes, eyebrows plucked according to the fashion of her day, and her sweet smile, enjoys great popularity, in spite of the dark-green tonality accumulated over the years. She is seated on a terrace against a mountainous landscape in a diffused illumination; Leonardo said: "Paint a portrait in bad weather at the fall of evening." The portrait was probably painted between 1503 and 1506, and Leonardo took it with him to France, when he was invited there by Francis I. Vasari says the unfinished portrait represented the third wife of Francesco del Giocondo, patrician of Florence (according to Raymond Stites, she is Isabella d'Este, wife of the Duke of Mantua). Whatever her identity, she has been rendered immortal in one of the great portraits of the world (Fig. 152).

Toward 1485 the High Renaissance style became apparent. Perugino's *Crucifixion* (National Gallery of Art) shows the style the young Raphael took over. The parklike landscape, where figures stand motionless with clasped hands under a calm blue sky, has the atmosphere of a pleasant summer day; the suggestion of suffering goes no further than custom required.

Raphael's short but brilliant life (1483–1520) falls into three periods. During the Umbrian-Perugino period (1483–1504), when he was an apprentice to Perugino, early Raphael paintings were hardly different from those of Perugino. During his transitional Florentine period (1504–1508), he formulated a style after having copied the great works of Masaccio and Leonardo. *St. George and the Dragon*, the *Madonna del Granduca*, and the *Madonna of the Chair*, like most of his Madonnas, large altarpieces, and portraits, are from the Florentine period. His mature period (1509–1520)

n Rome included his frescoes. later altarpieces. the *Sistine Madonna*. portraits of Julius and Leo X, designs for tapestries and the *Transfiguration*, his last painting. which was inished by Giulio Romano. Raphael's work was praised by his immediate followers, and Nicolas Poussin and the French classicists acknowledged him during the seventeenth century. He was practically deified during the eighteenth century. admired during the nineteenth, and criticized during the twentieth. Raphael's drawing was based on a study of models. but his saints and madonnas are idealized types. His style was that of Perugino, enriched and perfected; his talent was to absorb influences from several artists—Leonardo. Donatello. Fra Bartolommeo. Michelangelo—and to unite these influences in a style that appeared original.

His international reputation is based on the frescoes in the *Stanza della Segnatura* of the Vatican. entitled: (1) *Disputation* (2) *School of Athens* (3) *Parnassus* (4) *Prudence. Force, and Moderation*. They contain no deep-seated philosophical concepts and there is little individual characterization. The interest is rather in the postures of the figures and in the way the figures are interlocked through gestures. The mood in Raphael's *Saint George and the Dragon* (National Gallery of Art) is reposeful. hardly what one might expect in a life and death battle. Rhythmic lines link up the composition in a graceful manner. The rolling Umbrian landscape. with its clear atmosphere and beautiful vistas onto towers and hills. shows nature arranged, improved. and idealized like Greek sculpture during the Classic period. The small *Cowper Madonna* (National Gallery of Art). is calm and serene. The dark cloth merges with the dark earth. and out of this dark tonality rise the light tints, the figures against a clear sky. A thin gauzelike veil encircling arm and shoulders emphasize the solidity of the figures. and the action of the child momentarily halted, is opposed to the relaxed posture of the mother. Mother and Child are emotionally united. their minds fixed on the future, the Passion. A meditative. serious spirit and a sweet, subdued melancholy underlie the peaceful scene. This relaxation is but a foil against which Raphael suggests an inner tension that must have been readily felt in Raphael's own day. when thoughts of religion were uppermost in the minds of men. In Raphael's *Sistine Madonna* the Queen of Heaven descends from the clouds as the curtains are drawn back (Fig. 148). Though a heavenly vision. she appears simple and unaffected; this unassuming quality is perhaps the secret of her appeal. The Christ Child's *serious expression* seems to reveal .is divinity, as his unchildlike gaze is contrasted with *putti* below. The Virgin, slightly embarrassed at

presenting a divine Child, remains floating above the clouds. St. Barbara sinks into the clouds with eyes modestly removed from the Virgin. Pope Sixtus II, from whom the painting takes its name, points, as if to recommend mankind to the Queen of Heaven. Coming at the end of a long development of this motif, it seems to represent the ultimate solution, representing for Christian art what the Zeus by Phidias had meant to antiquity.

Raphael's skill as a space composer is well illustrated in his *Galatea* (Fig. 149), a fresco in the Villa Farnesina. Figures are combined into groups, shapes are adjusted to fill spaces, and heads in profile and three-quarter views gaze up or down for the sake of contrasting effects. In spite of wind-blown drapery, fluttering hair, and a brawny fish-tailed triton embracing a Nereid, this is a matter-of-fact presentation. The human figure is given an aloof, unemotional, and sculpturesque treatment. Raphael deals with mythology in the grand manner, and his decorative style forms the basis for a later development by Rubens and Poussin.

After the death of Raphael (1520), the full bloom and joyousness of the Renaissance turned to sober thoughtfulness under the influence of the Counter Reformation. The sixteenth century was dominated by a few outstanding artistic personalities, which include Raphael, Michelangelo, Titian, Tintoretto, and Correggio, though the style was founded on that of Leonardo.

Michelangelo Buonarotti (1475–1564) was twenty-three years younger than Leonardo, and, like Leonardo, left some of his greatest works unfinished. Michelangelo was primarily a sculptor; he painted only incidentally, and yet produced the ceiling of the Sistine Chapel. Unlike Leonardo, who was universal in his interests, Michelangelo concentrated on the human figure. He lived when art had mastered all means of expression and used these means for the illustration of great themes in religion. Directing himself toward the sublime and superhuman, he expressed his own emotions through art. He also created a style of his own, which laid the foundation for the Baroque. He lived most of his life in Florence, but spent the last thirty years in Rome. In his *Holy Family* for Agnolo Doni (1504–1506), a circular painting (*tondo*) in oil, he illustrates a complicated motion of handing the child back over the shoulder of the mother to Joseph. Much action is concentrated in a limited space, which, in its plastic richness, was perhaps aimed to surpass Leonardo's *St. Anne* cartoon. Nude figures in the background were placed there for no reason of story, but because Michelangelo took a delight in the human figure.

RENAISSANCE ART

The *Sistine Chapel ceiling* (1504–1508), commissioned by
Pope Julius II and carried through by Michelangelo under
protest, created a sensation when the chapel was consecrated.
A painted architecture (Ill. 113) divides the surface of the
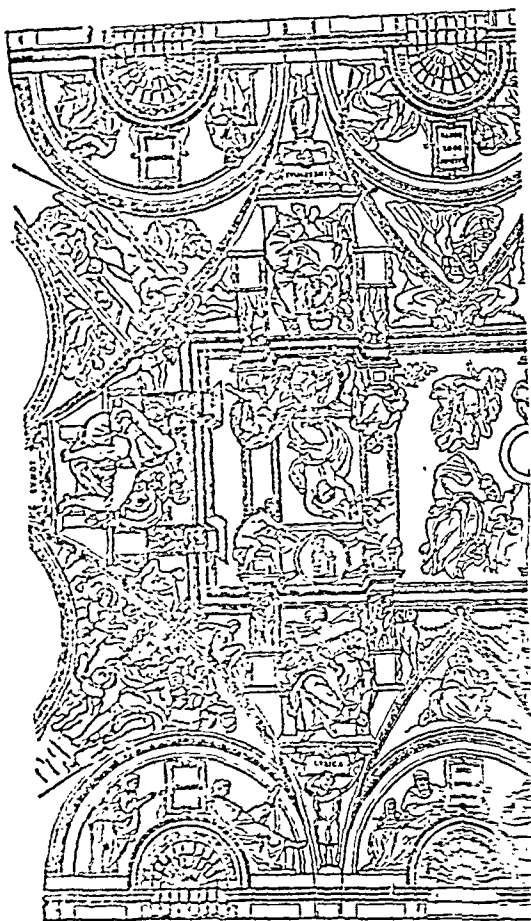
Ill. 113 Michelangelo: Sistine ceiling, section ~~~~
After Michelangelo, Langewiesche ~~~~

barrel vault into panels with nude figures. The ~~~~
Creation, the *Fall of Man*, and the *Story of* ~~~~
semblage of over 340 figures of heroic ~~~~
gigantic task, even of physical endurance. ~~~~
on top of a scaffolding looking up toward the ~~~~
angelo himself had to press a paper cartoon ~~~~
plaster so the outlines of the drawing ~~~~
through the paper to produce guide lines ~~~~

the *Temptation* and *Expulsion* (Fig. 153), Eve, in an easy reclining pose, receives the apple from the serpent with apparent indifference, whereas Adam reaches out eagerly, thereby assuming a fair share of the guilt. In the expulsion scene Eve crouches in the shadow of Adam. A grand sweep of line is suggested by the continuity of arms, as Adam wards off the angel. In the *Creation* scene, the Lord, rushing toward the languid Adam, passes on to him the spark of life. The energetic hand of the Lord contrasts with the limp hand of Adam, awaiting the life-giving touch. A mighty gesture of arms suggests the Separation of Land and Sea. The Lord, a heroic figure, goes through the act of creation without effort; a thrust of the arm brings forth sun and moon and darkness is held back, opening the sky to light. Five sibyls, classical counterparts to the Hebrew prophets, include three for the continents, Europe (Delphic), Africa (Libyan), and Asia (Persica), one for Italy (Cumea) and one for Greece (Erythraea). In each one an emotional element is brought out; an active force from within stirs the figure to action. Michelangelo probably had himself in mind when he painted Jeremiah, sitting listless, bowed down by sorrow. On the end wall of the chapel Michelangelo later painted the *Last Judgment* (1534–41). Christ, far from sitting in calm judgment, appears agitated with a gesture of condemnation as the Virgin shrinkingly approaches him to intercede for mankind. Patriarchs, prophets, sibyls, apostles, and martyrs crowd around Christ in fear and trembling, and present their instruments of martyrdom as claims for mercy. Michelangelo, perhaps projecting his own sense of guilt, sees doom, terror, and despair on the day of judgment. His theme is "Howl ye; for the day of the Lord is at hand; it shall come as a destruction from the Almighty" (Isaiah 13:6). A reddish glow in the lower right corner denotes the fires of hell. Salvation receives less attention than fear of punishment.

Among the Florentine painters of the High Renaissance, Andrea del Sarto (1486–1531) deserves special mention.[11] Called the "perfect painter" by the Florentines, he maintained a high level of quality, though he produced no work rivaling that of his great contemporaries. He was a fresco painter and produced altarpieces like the *Madonna of the Harpies*, an extremely competent and satisfying work that has retained its popularity.

Titian (c. 1477–1576) was the leading master of the Venetian School and one of the greatest painters of all time. During his long life he was enormously productive; nearly 300 canvases have been attributed to him. In his youth he painted like his master Giorgione, but gradually he developed

his own style. Titian was the most evenly developed of Venetian painters; realism and idealism, form and color, a lyric as well as a dramatic expression fused in his style. He dealt with every type of subject known to his age—mythology, literature, and religion all contributed to the subjects of his paintings—though at times the idea behind the picture has been lost, as in his *Sacred and Profane Love*, painted in the mood of Giorgione.

In *Bacchus and Ariadne* (National Gallery, London), the color, though somewhat darkened by age, was not equaled till Rubens. In an unsymmetrical composition, the *Rape of Europa* (Gardner Museum, Boston), the weight of the bull on one side is balanced by the cupids in the opposite corner. In this pictorial mode, the distant shore is suggested, but not rendered to emphasize depth by exact value relations. In the *Worship of Venus* or *Garden of Love* (Prado), based on a poem by Philostratus, a swarm of romping blue-winged cupids collecting apples in baskets furnished models for all later paintings of children in landscape settings. Titian painted *Venus with a Mirror* (reproduced on the front cover) in late maturity. In this he depends more on light and shade and less on brilliance of color. Venus is seated on a couch before a mirror, a classical marble come to life, luminous, in the midst of half-tones and shadows. A string of gleaming pearls resting lightly on her blonde hair curves into light and falls back into shadow. A large earring suspended against translucent shadow catches the full light. How convincingly the hand, with its outspread fingers and its bluish and pinkish tints, is detached from the body. Not photographically realistic, it is unique; only Titian could have painted it (Fig. 154). A chain bracelet clings to the wrist, then slips away to hang vertically. The light and shadow are not due to any consistent, realistic illumination. Titian's style was removed by a century from that later mode that studied the effect of real daylight. It was not his purpose to place an object in space with scientific accuracy; he introduced only as much reality into his painting as he cared to absorb into a general decorative scheme. Linear rhythm, counting so much in Botticelli, is of secondary interest here. Titian's style is broad, almost as ample as fresco, yet his brush strokes vary. The softness of hair is suggested without each hair being painted separately. We are made to feel the softness of flesh, the stiffness of brocade, the bulk of the fur-lined mantle by the handling of the pigment. This "Venetian pictorial mode" influenced the painting of the seventeenth and eighteenth centuries. Rubens, Van Dyck, Velázquez and Watteau turned to the mode of Titian, each modifying the Venetian mode to his own ex-

ing. In Titian's technique, modeling is completed in the mon-ochromatic underpainting, a grayish color that is not unlike a black-and-white version of the finished painting. The color is then added in superimposed layers of oil color, applied thinly and transparently over the underpainting. These so-called glazes allow the modeling to show through the film of color.

In Titian's *Young Woman at Her Toilette* (National Gal-lery of Art), the dark-complexioned companion and the mirror form a background for the woman's lighter tints. A fullness of form stresses completeness of relaxation. Gazing blandly into the mirror, she lifts her golden tresses in a graceful, measured movement that emphasizes the com-posure and calm of the scene. In this painting, as in the *Flora* (Uffizi), we feel the artist in love with life; such paint-ings are affirmations of joys. In his *Assumption of the Virgin* (Fig. 155), the event is made to seem plausible and is presented as an occasion for joy on the part of the disciples left behind. This is Mary's hour of triumph, as a cloud of angels lift her heavenward. All participants are of heroic stature, and the Virgin is enveloped in massive drapery which gives her the weighty grandeur required for the occasion.

Titian's younger contemporary, Jacope Robusti known as Tintoretto, succeeded him as the leader of the Venetian School. Tintoretto's aim was to combine the color of Titian with the drawing of Michelangelo, but his audacious style did not always meet with his contemporaries' approval. In the *resentation of the Virgin in the Temple*, an incident in the life of the Virgin is developed into a dramatic event. The lit-tle girl appears before the high priest at the top of a magnifi-cently carved staircase (Fig. 156). To emphasize depth, a figure in the lower foreground points toward the Virgin, an-other figure reclines, occupying three steps to suggest exten-sion in depth. Some of his masterpieces are in the Ducal Palace and in the Scuola di San Rocco in Venice. In a painting, perhaps done at the very end of his life, *Christ at the Sea of Galilee*, the water looks as if it were part of a vast sea. There is hardly anything to equal it in paint-ing until the nineteenth century. The sea is plowed up into sharp ridges as clouds move in the distance. Flashes of light fringe the tops of the waves and accent the leaves. The illumination is scattered and figures, no longer isolated, have become a part of the landscape. The figure of Christ beside the water exists in volume. Though the feeling for reality seems emphatic, if we examine carefully, we note this is an artificial storm, inconsistent in detail but powerful in its gen-eral impression (National Gallery of Art).

The greatest decorative painter of the Venetian School of the sixteenth century was Paolo Veronese (1528–1588), born in Verona. His art is distinguished by a heightened emphasis on decoration, on fine costumes and magnificent architecture; splendid settings are more important than in Titian or Tintoretto. Pageantry, which disappeared before the concentration of the High Renaissance, returned with all the gains that painting had made since the days of Botticelli. A Veronese has a silvery, cool light in place of Titian's warm glow. The paintings for which he is best known are huge canvases containing many figures, often representing festivals in great marble halls, as in the *Feast in the House of Levi.* A small but very fine canvas, the *Finding of Moses* (Fig. 157), shows that Veronese did not succumb to the influence of the Counter Reformation, but carried the worldly spirit of the Renaissance late into the sixteenth century. The scene of Pharaoh's daughter finding the child Moses is presented like a climax in a play. Every motif is executed with a studied elegance, the kneeling maid presenting the child, Pharaoh's daughter startled, moving back, the supporting ladies pointing to the child as to a miracle. The illumination is decorative; a fringe of light sets off a figure or a shadow brings out an arm or a head.

Correggio (1494–1534) of Parma in North Italy carried Mantegna's illusionism further by painting domes as if they did not exist (Parma Cathedral). Celestial figures are seated on clouds surrounded by angels. Michelangelo labored over human giants in solemn and cosmic grandeur, whereas Correggio tossed off goddesses and angels in a spirit of play. As a late-comer, Correggio profited from the accumulated knowledge of the past. His *Marriage of St. Catherine* (Louvre), in its delicate tenderness, foreshadows the eighteenth century. In his *Holy Night* the mystery of Fra Filippi Lippi and Leonardo is given an extravagant and more obvious interpretation (Fig. 158). A magic, but very real, light emanates from the Christ Child, and every device is used to force the point. Correggio interpreted his topics in the spirit of gaiety; his colors are light, his brush work swift, his manner elegant. What has worried his critics is the fact that he no longer identified himself with his subjects. He reached beyond the Renaissance, and his true followers came in the Baroque and Rococo painters of the seventeenth and eighteenth centuries.

Mannerism in Painting. Michelangelo (d. 1564) and Titian were the outstanding artists of the century. The remaining sixteenth-century painting has been classified under such labels as Mannerism; Academicism, or Eclecticism; and Nat-

uralism. Dates no longer indicate styles, as different styles
were in vogue at the same time. Mannerists like Correggio
followed Leonardo, and El Greco followed Tintoretto, a
Mannerist in his own right. Others in this category were
Bronzino, Pontormo, Vasari, Il Rosso, Giulio Romano and
Parmegianino; these painters were more than imitators. The
founding in Bologna of an academy (1585) by Lodovico Carracci (1555–1619) with his cousins Annibale and Agostino
brought the idea of the art school and the term Academicism
into being. This Bolognese School was eclectic; it selected
from all the masters and used plaster casts, medals, drawings,
books, and engravings as teaching material; the study of
nature was also included. The Venetian School and Correggio were held up as models; Guido Reni (1575–1642) and
Domenichino (1581–1641) were late adherents. The naturalism of Michelangelo da Caravaggio (c. 1565–1609) introduced a trend opposed to Raphael in his choice of models,
taken from the streets, and in his harsh contrast of white
light against near-black shadows.

In the seventeenth century, painting in all countries again
took on a spontaneous character; the term Baroque is a convenient common denominator for work done in this period.

Renaissance Sculpture in Italy. The classical influence was
less in sculpture than in architecture, and Renaissance sculpture was often more vital than the Roman examples which inspired it. As in painting, a vigorous naturalism developed, as
well as tendencies to idealize or to emphasize a devotional
ment Brunelleschi, Donatello, and Pollaiuolo represent the
natural trend; Ghiberti, the Della Robbias and Desiderio da
Settignano the devotional-sentimental. Verrocchio combined
both, and Michelangelo established the style of the High Renaissance. Sculpture was largely a Florentine movement, except for Jacopo della Quercia, who was Sienese. The cathedral
of Florence, which had been in the process of construction
for a century, still required sculptural decoration, and the
same was true of the Baptistery. The sculptors who developed
in connection with these buildings, Brunelleschi, Ghiberti,
Donatello, and others, contributed much to the formation of
the style.

In a competition with Brunelleschi, Ghiberti won the commission to design what became his first bronze doors for the
Baptistery in Florence. In a second pair of doors, Ghiberti
developed a pictorial style for bronze in ten large panels,
using small figures in the round on the front planes, a graceful Gothic line, and elaborate perspective with one plane
merging into another (Fig. 159). Ghiberti worked on the
Baptistery doors for over twenty-five years. Michelangelo

praised them, saying that they were worthy of being used for the "gates of Paradise."

A terra-cotta relief of *Madonna and Child* (National Gallery of Art), attributed to Ghiberti or to Jacopo della Quercia, reflects the transition from Gothic to Renaissance. The tilt of the Virgin's head, the pronounced curve in the backward lean, and the sloping shoulders are still in the manner of Gothic art. Sculpture attained freedom in the modeling of the figure before painting. The study of the figure was based on observation rather than on a scientific knowledge of muscles and bones. Much attention was paid to drapery; cloth was soaked in plaster to give it stiffness and draped over a wooden figure to give the sculptor something to work from.

Jacopo della Quercia (c. 1375–1438) of Siena developed a style anticipating Michelangelo. One of a series of reliefs from the portal of San Petronio, the *Creation of Eve*, shows his powerful figure compositions using massive breadth contrasted with linear rhythms (Fig. 160). The *Tomb of Ilaria del Carretto* (Lucca Cathedral), traditionally attributed to Jacopo, shows a recumbent figure on a sarcophagus with *putti* and garlands in high relief. The pleated drapery folds provide a lively contrast to the tranquillity of the figure and the massive breadth of the base.

Donatello (c. 1385–1466), a pupil of Ghiberti and the outstanding sculptor of the fifteenth-century Florentine School, was the first great sculptor of modern art. He excelled in all phases of sculpture, in reliefs and in monumental sculpture, in wood, terra cotta, stone, and bronze. He overcame the Gothic traditions and established a more robust manner, based on individual character. Most of his works were executed for the Church, the guilds or the communal government. Donatello's realistic tendency appeared in such early stone statues as the emaciated *St. John the Baptist* (Bargello), who is represented singing and tottering as he returns from the desert. The bronze statue of *David* was perhaps the first freestanding nude statue since antiquity. The features are calm, but the lean and lanky proportions are quite unclassic. His colored and gilt *Annunciation* (Fig. 161) rivals Ghiberti for graceful elegance. The details are adapted from the Classical. To have something to show the pilgrims at Padua during the jubilee year of 1450, Donatello made a marble and bronze high altar. He also produced for Padua the first equestrian bronze s͏ a large scale since ancient times, his *Gattamel* t high), an Italian word meaning "honeyed cat" (pression "sly dog"). The small rider, represented

general, was a monument to the Venetian general Erasmo da Narni. Donatello's remuneration for this work was 1650 gold ducats, equal to more than $10,500 (1911). Two bronze pulpits with reliefs of figures modeled with dramatic energy were finished and installed in the Church of San Lorenzo (Florence) after his death. An early statue of *David* for the Martelli family, now in the National Gallery of Art, is perhaps the most important example of Renaissance sculpture in the United States.

Antonio Rossellino (1427–1478) was the designer of the vertical wall tomb for the humanist *Leonardo Bruni* in Santa Croce. A marble sarcophagus supports a bier with the recumbent figure of the deceased. The effect depends on the well-proportioned niche and a wealth of beautifully carved architectural detail and figures in relief.

One of the best-known of Donatello's pupils was Desiderio da Settignano, of whom Vasari says, "He was one of the fortunate few who, without labor, achieved loveliness." Less versatile than Donatello, the delicacy and charm in his specialty, youthful figures, are unsurpassed. He worked only in marble. Desiderio was particularly successful with portraits of young women and children, as in the portrait of *Marietta Strozzi*, which exists in three versions, one of which is at the National Gallery of Art (Fig. 162). Marietta was a young heiress who was considered unduly emancipated: "She lived where she liked and did what she would." In Desiderio's relief of the *Young Christ with Saint John* (National Gallery of Art), the relief is hardly over a quarter of an inch deep, which gives to the head of Christ a vaporous, apparitionlike quality.

Mino da Fiesole (1430?–1484) is known for his exquisite craftsmanship and delicate finish. He worked directly in marble without sketches or models. His portrait busts are his best works, but he is hardly on a level with the leading sculptors. Benedetto da Maiano (1442–1497), chief pupil of Rossellino's, amplified his master's form; his style led to the High Renaissance.

Antonio Pollaiuolo (1432–1498) and Andrea del Verrocchio (1435–1488) were both painters and sculptors. Both worked in bronze and excelled in expressing energy and in bringing out detail. Verrocchio's bronze statue of *David* (Bargello) represents him as a wiry youth, more energetic than Donatello's. Verrocchio's bronze equestrian statue (Ill. 114) of the condottiere *Bartolommeo Colleoni* suggests a man of compelling force. Equally remarkable is the careful rendering of details in the armor and trappings. Verrocchio also communicated something of this grim determination in

his terra-cotta bust of *Lorenzo de' Medici.* Force, intelligence, and a penetrating gaze suggest a living personality (Fig. 163).

To produce a sculpture less expensive than marble or

Ill. 114 Verrocchio: Bartolommeo Colleoni, Venice. *After Lübke*

bronze, yet permanent, Luca della Robbia introduced a glaze over the pigment on terra cotta, which protected the color from moisture. The Della Robbia family continued in this craft for three generations, headed by Luca, his nephew Andrea, and Andrea's son, Giovanni. Much of this work is in relief and was designed to be placed in a building, over a door or against a wall. The colors are blue for backgrounds and opaque white glaze for the figure; details are sometimes picked out in other colors. Luca's art is the least archaeological, the least mannered, and the most human.

Michelangelo's statue of *Moses* (Ill. 116) in S— Pietro in Vincoli (Rome) is from an unfinished tomb f   Ju II. This seated marble statue represents Mose

he found his followers about to worship the golden calf. Suppressed aggression is revealed by the knitted brow; pain, in the expression of the eyes; contempt, in the thrust-out lower lip. In the Biblical account, Moses gives vent to his anger and destroys the tablets. Michelangelo has him tightly clutch the tablets, which had almost slipped from his grasp. The moment of the most intense excitement has passed. We may imagine that the left hand, caught in the drapery, had gripped his beard a moment before, but now, relenting, has slipped back. The original intention of rising is still indicated by the feet drawn back. The arm in full front view contrasts with the arm holding the tablets, the thin garment with the heavy cloak draped over his knees.[12] The horns on his forehead are due to a mistranslation of the Hebrew text, which refers to rays of divine inspiration rather than horns.

Michelangelo's activity may be divided into five periods. The *Pieta* (St. Peter's, Rome) and the *David* (Academy, Florence) were the important works of the first period 1475–1505). The Sistine Ceiling occupied much of the second period (1505–1512); the unfinished tomb for Pope Julius I, of which the *Moses* remains as the most important part, took up the third period (1513–1521); the Medici tombs, the fourth (1523–1534); and work on the dome of St. Peter's, his fifth (1534–1564).

Michelangelo's contemporaries did not understand the idealized Medici figures; they complained that Giuliano and Lorenzo de' Medici did not resemble the dukes. Michelangelo, who had no interest in portraiture, replied that in a thousand years no one would remember what the dukes looked like. The feminine figure of Night and the masculine figure of Day were placed on Giuliano's sarcophagus Fig. 164); Giuliano was frank and forthright, like night and day. Lorenzo, on whom great hopes had been placed to advance Italian political unity, succumbed to mental illness and died early. He was represented by Michelangelo with bowed head and features cast in shadow. On Lorenzo's sarcophagus the figures of Twilight and Dawn, the uncertain hours, symbolize his uncertain, gloomy disposition. However theology and philosophy may be involved in the Medici monuments, and in his Sistine Chapel paintings, Michelangelo's own emotional life holds the key that should give a more complete understanding of them.

Mannerism in sculpture is represented by Jacopo Sansovino, a Florentine artist who settled in Venice, Benvenuto Cellini (1500–1572), Giovanni da Bologna (1524–1608), and Adriaen de Vries, one of Giovanni da Bologna's pupils. Benvenuto Cellini made his reputation as a goldsmith. The *Salt*

Cellar of Francis I, cast, chased, and enameled, is his only authenticated work of this nature (Fig. 165). The place for the salt is boat-shaped, the pepper box is in the form of a Roman triumphal arch. Statues of Neptune, the God of the Sea, and Tellus, Goddess of the Earth, are seated facing each other to symbolize salt and pepper as the gifts of sea and earth. Cellini's best-known bronze is the statue of *Perseus* (Florence), holding the decapitated head of Medusa. With an abundance of detail, especially in the ornate base, the *Perseus* is technically accomplished, though the subject is repellent.

A Flemish artist, Jean de Boulogne, translated to Giovanni da Bologna after he had become a naturalized Italian, was the last great sculptor of the Italian Renaissance. His bronze *Mercury* poised in flight on one foot is a highly perfected figure, elegant in proportions, and skillful in balance. *The Rape of the Sabine Women* (Loggia dei Lanzi, Florence) was planned for variations of posture and for three types of nudes, to afford changing aspects of forms which gracefully glide into one another as the group is viewed from different positions. The figures are intertwined to follow a spiral line, the contrasting types adding to the interest of the group.

Adriaen de Vries followed Giovanni da Bologna in style. In a bronze group of *Virtue and Vice*, idealized classic figures assume elegant poses; in another period the same subject might have been staged as a strenuous battle between good and evil. Feminine form is given a masculine touch, as men had long served as models in the study of the human figure.

Painting in France, Spain, the Netherlands and Germany, 1400–1600: France. During the fifteenth century, when France was still divided politically, local centers of painting developed, as at Avignon (p. 203), Dijon, Moulins (Burgundy), Bourges, and Tours. The Netherlandish influence was strong in such triptychs as *The Burning Bush* by Nicholas Froment (d. 1482). The Master of Moulins in the *Virgin in Glory* (Moulins Cathedral) combines Netherlandish types with the breadth of the Italian style. The most distinguished of painters who worked for the courts of Charles VII and Louis XI was Jean Fouquet (1415–1477 or 88) of Tours; Fouquet was primarily a painter of miniatures. In a panel of a diptych of *Étienne Chevalier* kneeling with folded hands beside St. Stephen (Berlin), little remains of the Netherlandish style. The right panel represented *Agne* mistress of Charles VII (Antwerp). The Christ Ch. seem like additions to atone for the worldly court-art style with no pretense of devotion.

trait of *Charles VII* (d. 1465) depicts with sober, unprepossessing realism the king who drove the English out of France.

The School of Fontainebleau. Before the development of advanced means of communication between countries, the Renaissance was introduced to France through ambassadors, bishops, cardinals, merchants, and artists who went to Italy and brought back Italian paintings. Invasions of French kings into Italy also contributed to the spread of Italian art to France. Between 1495 and 1559, four French kings, Charles VIII, Louis XII, Francis I, and Henry II, made raids into Italy under one pretext or another. These wars were comparatively mild: at times the French kings were even well received, and the contrast between medieval France and civilized Italy impressed the French.

Francis I brought Andrea del Sarto, Benvenuto Cellini, and Leonardo da Vinci to France (Amboise). Rosso (1531) and Primaticcio (1532) were settled in his hunting palace at Fontainebleau, where they painted interiors and contributed to the application of Renaissance details to the decorative arts. Primaticcio's elongated forms influenced Germain Pilon and Jean Goujon.

During the reign of Francis I (1515–1547), a vogue started for portraiture, chalk drawings and small paintings of which many have survived (Musée Condé, Chantilly). Jean Clouet, a Fleming, was the chief master of this school. The portrait of *Francis I* (Louvre), attributed to Jean Clouet, has sharp features, elaborate costume and pale flesh tints. Jean's son, François Clouet (c. 1510–1572), court painter to Francis I II and Charles IX, painted *Diane de Poitiers* (?) in a crowded interior seated in her bath beneath a red satin curtain. The drawing is meticulous and sculpturesque, the smooth surface like enamel (Fig. 166); Flemish and Italian influences have merged in a new style. A favorite of the French School is the portrait bust, attributed to François Clouet, of *Queen Elizabeth of Austria*, wife of Charles IX (Louvre). Its delicate flesh tints contrast with a rich pattern of exquisitely rendered costume detail; textures are expressed without a trace of brush work. His full-length portrait of *Charles IX* (Vienna) is essentially an elaborate decoration; though it is inscribed 1563, it was probably painted in 1569 when Charles was nineteen. Corneille de Lyons painted small portraits on wood against blue-and-green backgrounds in a smooth technique. The same type of portrait was produced on enamel by Leonard Limousin. Essentially this portrait style was international and not basically different from Holbein's.

Spain. Unlike Italy and the Netherlands, Spain had no middle class; Church and court were the chief patrons. Her

great sixteenth-century artist was El Greco, meaning "the Greek." He was a Cretan by birth (c. 1537) and called himself Domenico Theotocopuli, the Spanish equivalent of his Greek name. At the age of twenty-three, he left Crete for
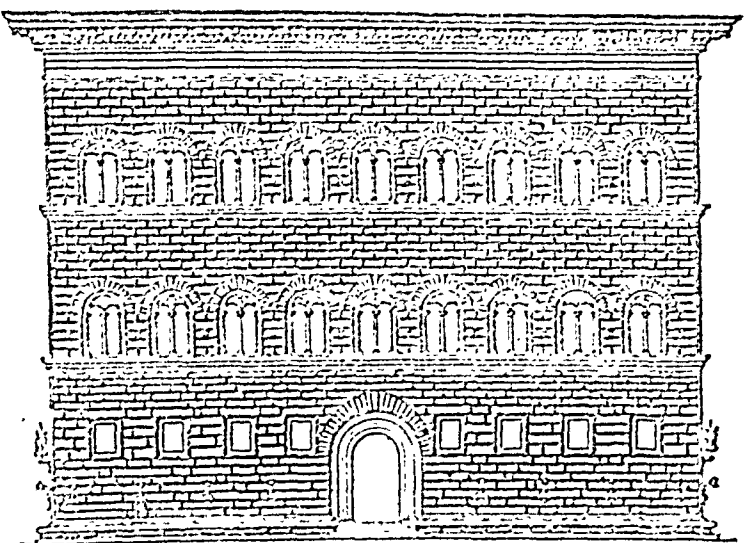
Ill. 115 Strozzi Palace, Florence. *After Roger Smith*

Italy, where he studied with Titian and was influenced by Tintoretto. Around 1572 he settled in Toledo, Spain. El Greco elongated his figures as Parmigianino had done, but differed from the Italian Mannerists in his nervous energetic style full of movement and originality. He introduced tall disjointed figures with impossible heads and color dissonances, chiefly white, ivory, black, vermilion, yellow ocher, and rose madder. Even during his lifetime there was much controversy about his art, but fellow artists and successors such as Velázquez held him in high regard. In the *Virgin with Saint Inés and Saint Tecla* (Fig. 167), the drapery is arranged in jagged folds, and in the color we can see a kinship with Tintoretto. Surfaces hang together; we no longer feel the parts as elements of a geometric pattern, and each figure merges in the total impression. The hands of Saint Tecla continue into the palm leaf she holds, the edge of the Virgin's mantle is taken up by the Child's leg. The head of the Virgin is in shadow, and the heads of the Christ Child and both angels are in the light. The icy blue of Saint Tecla contrasts w   warm orange of the cloak of Saint Inés Hands are l small, often arranged in contrasting diagon style has been called "flamelike"; one's eye

along lines that undulate from side to side, and from shape to shape. Such fusion of color, form, and movement was new in painting. In Botticelli, movement was around contours; where figures meet, the linear rhythm was slowed up. Bellini's *Feast of the Gods* seems static in comparison to El Greco.

The Netherlands. The Italian influence in the Netherlandish sixteenth-century painting produced such painters as

Ill. 116 Michelangelo: Moses, Rome.
After Lubke

Jan Gossaert (known as Mabuse), Barent van Orley, Pieter Pourbus the Elder, Antonio Moro, Paul Bril, and others. They were able and elegant followers of the Italian formula, but made no basic contributions of their own. The most original painters between the late fifteenth and the early seventeenth centuries were Hieronymus Bosch and Pieter Brueghel the Elder.

Hieronymus Bosch, c. 1450–1511. Bosch, misunderstood for centuries, now stands revealed as one of the great masters of the Reformation. Leonardo expressed himself through a purely rational pursuit of knowledge and seemingly applied this to his art;

Bosch, with equal penetration, used an emotional, folklore approach as a disguise to express his own religious convictions, the "Adamite gospel of primally pure, divine nature" (Wilhem Fränger). His use of symbolism was not arbitrary personal imagining of "gruesome pictures of spooks and horrid phantoms of Hell" (Carel van Mander), and his "incoherent imagery," as Fränger has demonstrated, was well founded on mythology and folklore. As revealed by psychoanalytically oriented study, his choice of symbols in many cases is valid today. Until specific Biblical and literary references were discovered and related to these seemingly

fantastic inventions of Bosch's, the background of this Adamite sect was misunderstood and many wrong interpretations made. Only in certain devotional paintings done for the initiated did Bosch use this involved symbolism; others of his paintings were more easily intelligible. The triptychs with concealed meanings are in Madrid (Prado): *The Millennium* (or *The Garden of Earthly Delights*), *The Temptation of St. Anthony* and the *Hay-Wain*.

In *The Millennium* (Fig. 168) the central panel was not meant as a warning against a life devoted to sinful lust, but was intended to describe "the beauty and purity of original human nature as it was created by God in his own image" (K. Burdach, as quoted by Wilhelm Fränger). This panel illustrates the joys of Paradise as it was in the time of Adam, before original sin came into the world. According to a psychoanalytical interpretation, all culture requires a sense of guilt; before the year 1000 A.D., Christianity had created thousands of saints, demanded by its superego to expiate its own transgressions. Hell, in the right wing of the *Millennium* triptych, was reserved for the members of the old Church. Bosch seems to have belonged to this sect of the elect. The fountain in the Creation panel is based on the exact wording of the Latin Vulgate Bible, *fons*, which later was translated more freely as "vapor." The crystal tubes, glass globe, and phials of the fountain of life symbolize a procreation "clear and transparent as the play of light on water" (Fränger). Details that seem incomprehensible to us had a specific meaning to those initiated in the creed that anticipated the Reformation and was critical of the clergy. Wilhelm Fränger devoted an entire book to his well-documented theory that in Bosch's religious paintings of his own convictions his seemingly extravagant imagination is thought-controlled. In the *Death of the Miser* (National Gallery of Art), Bosch deals intelligibly with a topic of the *ars moriendi* type known from woodcuts of the period. Bosch shows full command of the traditions of Flemish realism and his ability to express emotions through distortion and caricature in such subjects as *The Prodigal Son* (Rotterdam), *The Crowning of Thorns* (Prado), and *The Carrying of the Cross* (Ghent).

Pieter Brueghel the Elder, b. before 1530–1569. Brueghel was the first among the great Northern painters to paint easel pictures for private use. He chose his subjects and dealt with them in his own way, like a modern artist. He made Biblical subjects thoroughly real: *The Massacre of Innocents* (Vienna) takes place in a Flemish village in the snow on the ground. Brueghel preferred subjects with masses of people (*Open-Air Wedding Dance*,

created new types such as allegories, animal, still-life, and
marine subjects, and genre pictures dealing with manners
and customs (*Proverbs*, Berlin). Brueghel was a satirist; like
Erasmus of Rotterdam and Rabelais, he was contemptuous of
the world, which he believed was the work of the devil. An
excellent draftsman, he used a flat style with little modeling
and linear perspective. His technique suggests a water-color
manner painted on canvas in the oil technique of Van Eyck.
He did not use models, but painted from memory.
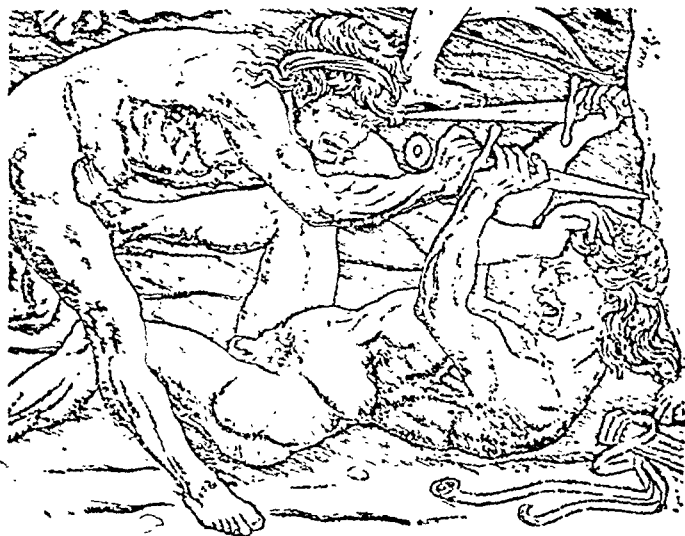
Ill. 117 Pollaiuolo. Battle of the Nudes, detail. *National Gallery
of Art, Rosenwald Collection*

In the *Triumph of Death* (Prado), the power of death,
cruel and inexorable, is symbolized by many skeletons in a
wide and bare landscape; the story is told by separate inci-
dents. Groups of skeletons war on humanity with arrows,
scythes, millstones, nets, forks, swords, and gallows; the
human beings are from all classes, including a king and
cardinal. In the *Parable of the Blind* (Naples), on a gray,
misty morning six grotesque figures, haggard and helpless,
stagger across the fields in uncertain movements: "If the
blind lead the blind, both shall fall into the ditch" (Matthew
15:14). Brueghel may have had in mind as the blind one of
the wandering preachers coming from the lowest and most
ignorant classes, who gathered followers and formed sects.
Brueghel, a believer, had no sympathy for such persons who
were, he thought, misleading the crowds. *Winter* (Vienna)

is one of his paintings of the months, of which twelve were originally planned. It shows hunters in a landscape with snow and has a fine atmospheric effect. Brueghel was the founder of the Netherlandish winter scene tradition continued in the seventeenth century. *Summer* (Metropolitan Museum of Art) illustrates a harvest scene when, during the rest period, the peasants eat and nap under the hot midday sun (Fig. 169).

Brueghel had been virtually forgotten for centuries until interest in him revived in our own day. Brueghel, like Bosch, was Dutch, and shows Bosch's influence in the symbolism of some of his religious subjects. Brueghel left many drawings, which were reproduced by engravings for popular distribution. Over half his paintings are in a broad format; fourteen are in Vienna and perhaps half a dozen in museums in the United States.

Germany. Albrecht Dürer (1471–1528) of Nuremberg was a painter-poet, profound and powerful. Traditionally accepted as the greatest German artist, he is in a class with Leonardo and Michelangelo. He copied Mantegna, studied nature, and was influenced by the Venetian School. In his art Dürer showed a grandeur of conception and a richness of feeling affected by medieval fantastic elements. He had imagination, originality, and a love for craftsmanship. Dürer was an excellent draftsman, and developed the woodcut and engraving on copper. As a portrait painter, he painted his friends in the spirit of the miniaturists—every wrinkle, hair, and vein are shown. He paints as if using a pen. In the marvelous portrait of *Hieronymus Holzschuher*, the eyes reflect the window opposite the sitter (Fig. 170). He seeks to express character through detail, and succeeds in catching much of the spirit of his sitter. He is the pioneer of genre painters with his drawings from popular life; studies of animals, flowers, and plants were not taken up again until a hundred years later. Dürer's landscapes also were in advance of his time. Through his books he created a scientific basis for art, as Leonardo had done in Italy. Through Italian influence, the life-size figures, the nude, and composition, instead of juxtaposition of detail, came into German art. Italian artists associated with merchants, princes, and high dignitaries of Church and state; German artists were in a class with saddlers, glazers, and bookbinders. There were no courts and no connoisseurs in Germany to support art, and commissions were modest compared to those of the Medici. The best painters owed their development to themselves rather than to their country.

Dürer was sober and factual, hardly the most emotional

of the German artists of this period. But in the woodcuts of his *Apocalypse* (Fig. 171) there is tension and struggle, nervousness and restlessness. Dürer never again achieved lines so charged with energy. *The Apocalypse* was an instance of an artist designing and publishing his own book. The story of the Revelation was illustrated in fourteen woodcuts with the text on the back. A breadth of manner differentiates woodcuts from engravings; the woodcut line is thick and bold. Woodcuts are related to pen drawings, as the artist draws directly on the block. After he has finished, a skilled craftsman cuts and chisels the background away, leaving the pen-drawn lines.

His engraving *Melencolia* (Fig. 172) represents a winged figure seated in the foreground, supporting her head on her hand in a thoughtful, almost brooding fashion; in the other hand she holds a compass in a listless, absent-minded way. A closed book is in her lap, her hair hangs in disorderly strands, she gazes into the distance. Tools are on the floor in disorder, a bat holds a scroll inscribed *Melencolia I*. Melancholy, one of the four temperaments, implied a person given to speculation and apathy. Though the instruments for science and labor are at hand, no action takes place. A great deal may be read into this print, and it also reflects Dürer's grief on the death of his mother, which is hinted at in the magic square (upper right-hand corner).

The engraving of *St. Jerome in His Study* represents the scholarly saint—the translator of the Bible into Latin—the saint who loves the quiet of his own study. Light pours in, reflecting round leaded panes on the reveal of the windows, and bringing out the grain of the heavy ceiling beams. Shadows are transparent and light, opaque, as in nature. An expression of textures makes cushions seem soft and glass, hard. The mood is one of peaceful contemplation.

The charm of Dürer's engravings, as in his *Knight, Death and the Devil*, is partly due to the fact that the medium is so clearly expressed: one feels tool and materials, burin and metal. What is admired in this print is the precision with which the plate is finished, as shown in the delicate modeling of the horse, the trappings, the ground, with a lizard on the right and in the opposite corner a skull, at which the horse of Death sniffs. The Knight, undaunted by Death and the Devil, is a symbol of the devout Christian for whom life is a crusade against fear and temptation.

Hans Holbein the Younger (1497–1543) of Augsburg was on a level with the greatest painters, but was given little opportunity to show his talents in historical and religious painting. He lived much of his life in England and ten years

in Basle; he left Augsburg early and, in his art, was an inter-
nationalist. Holbein was different from Dürer; he was
more objective, and excelled in portraiture. His colors are
thin and rich, no brush work is visible; he is clear and pre-
cise in the handling of
oil and crayons. His
drawings were engraved
by others on metal and
wood, as in his famous
series of 41 small plates,
The Dance of Death.
Each one is about 2
inches square, but is
remarkable for breadth
combined with expres-
sive detail. The plague
of 1348 had struck
Europe in succeeding
epidemics, all but de-
populating some dis-
tricts. Holbein's *Dance
of Death* was one of
many representations
in art, that for cen-
turies dealt with the un-
certainty of life follow-
ing the Black Death.

Ill. 118 Holbein: Dance of Death: The
Peddler. *After Brandt (1923)*

His interpretation was inventive, and at times less sinister and
touched with satire: as in the expression of misery on the
Peddler who discovered the skeleton tugging at his sleeve
(Ill. 118). His work includes many drawings of individuals of
the court of Henry VIII, who took him into service at 30
pounds a year and payment for all works done. Holbein was
put in charge of pageants in honor of the coronation of Anne
Boleyn; he painted Jane Seymour (two portraits, Vienna and
Woburn Abbey), and went to Milan to paint Christina of
Denmark, Duchess of Milan. His greatest portrait, that of
Joseph Hubert Morett (Dresden), was formerly attributed to
Leonardo. In the portrait of *Erasmus*, we feel the sensitive, in-
tellectual spirit of the scholar. In the portrait of *G.
Gisze*, he paints the merchant in his office, emphasizin
tures in the many details (Fig. 17?   *The Madonna c
Burgomaster Meyer* (Darmstadt),   the Burgom
Jacob Meyer of Basle for his f
massive in figure and background.
bined with a monumental char:
Virgin affording protection under i
   Matthias Grünewald (c. 1480–153

dorfer (b. before 1480–1538) and Wolf Huber discovered the beauty in nature. A romantic intimacy characterized Altdorfer's religious settings, as in the *Birth of Christ* (Vienna) placed in a winter landscape at night. In a well-known woodcut entitled *The Holy Family at a Fountain*, Mary has seated the Christ Child on the rim of a huge fountain placed under a Gothic vault. In a painted *Birth of the Virgin*, the event is placed in the choir of a cathedral, the scene includes a cradle and a stately bed. Child angels in the air circle between the piers and beneath the vaults in a dance of jubilation. Altdorfer's most important work represents Alexander's victory over Darius (Munich) and is an extraordinary performance of imagination and skill (Fig. 176). We look down as from a hill upon a sunset landscape with lakes, towns, and distant hills rendered with atmospheric effect and convincing spaciousness (dated 1529). On a wide plain the two opposing armies of massed infantry and cavalry, in full armor, are locked in battle. Thousands of men are included on a wood panel (about 15 by 10 feet); those in the foreground are rendered in considerable detail. Individually the figures are quite free in action, but the postures of the horses are toylike. Strategy rather than the horror of battle is emphasized; the fallen and wounded disappear in the total effect.

Lucas Cranach the Elder (1472–1553). painter and engraver, is stylistically related to the Danube School. He is particularly successful in uniting figures with landscape. In the *Rest on the Flight into Egypt* (Fig. 175), child angels of various ages surround the seated Virgin as attendants and playmates. Cranach was a friend of Luther's and court painter to Frederick the Wise of Saxony. The quality of the works ascribed to him varies because the many assistants in his large shop participated in works that bear his signature. His *Portrait of a Saxon Lady* is a competent example of the international portrait of the period, with special emphasis on a linear ornamental style. It is also a source of information on Renaissance jewelry (Fig. 178).

Renaissance Architecture: Italy. The chief Florentine architects were Filippo Brunelleschi. Leone Battista Alberti, the humanist, and Michelozzo, who began as a bronzeworker. Brunelleschi (1379–1446) designed the dome of the cathedral of Florence on an octagonal base, with ribs and an inner and outer shell (Fig. 104). The dome, placed on a high drum, dominates the skyline of Florence. It was built for external effect, a characteristic of Renaissance architecture, and was the largest dome built since the Pantheon. Thick walls (15 feet), a steep (elliptical) dome, and chains of timber and iron were used to resist the thrust; purists have criticized this use of chains in stonemasonry. Despite these
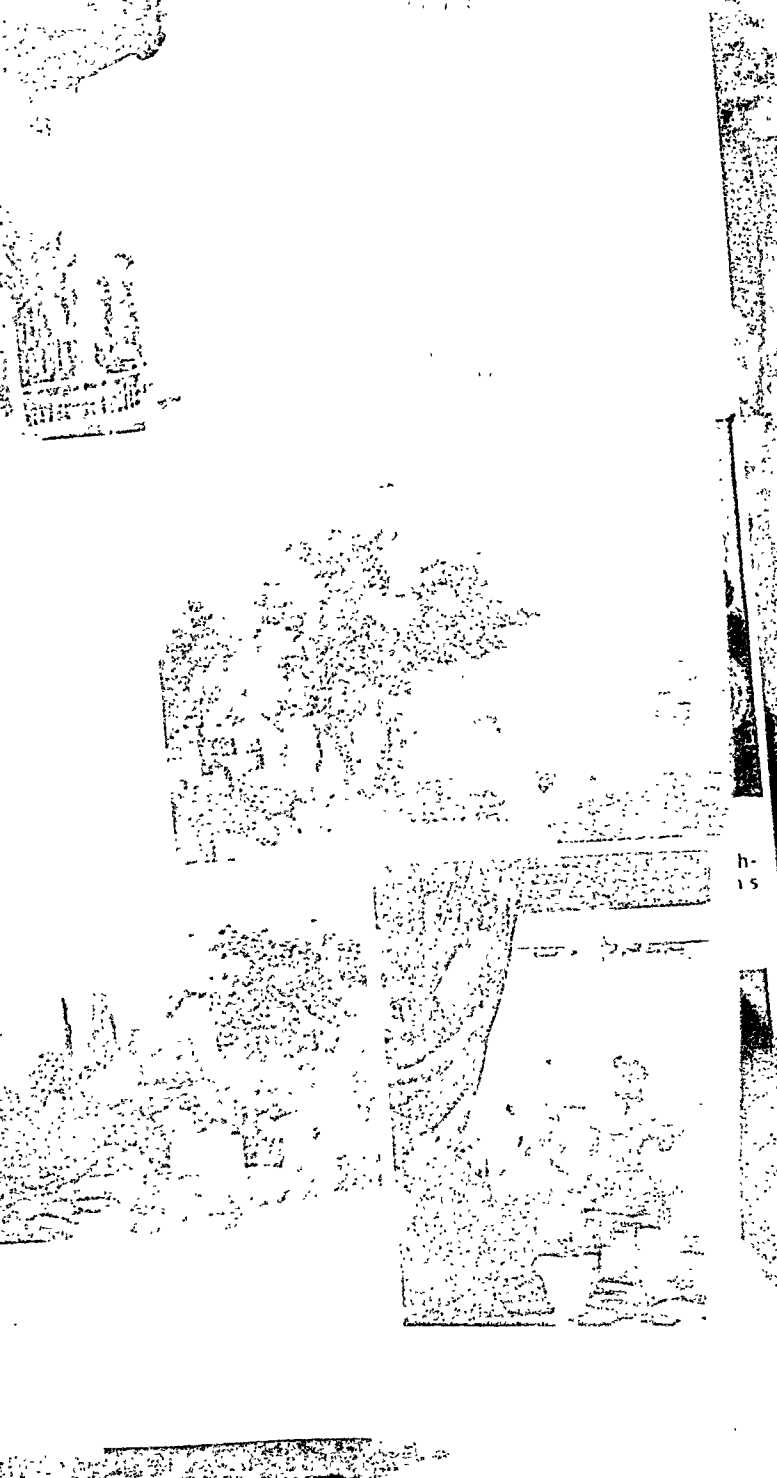
objections, the dome is handsome and an excellent piece of engineering. Brunelleschi also designed the monumental *Pitti Palace* and the graceful *Foundling's Hospital (Opedale degl' Innocenti)*. One of his most refined works is the *Pazzi Chapel* (attached to the Gothic church of Santa Croce), with its finely proportioned façade in the Renaissance style and its interior dome on pendentives. The Early Renaissance used both the Roman basilica type plan and the central Greek cross plan in its churches. Brunelleschi's church of *San Lorenzo* in Florence is unvaulted and uses Corinthian columns supporting round arches for the nave arcade. Alberti's church of *Sant' Andrea* at Mantua has barrel vaults on a Latin cross plan and a dome on pendentives. Inspired by Roman vaults, it has great breadth and repose. A porch in front of the façade was suggested by the Roman triumphal arch, and the use of the colossal order foreshadowed the Baroque.

Michelozzo (1396–1472) became the special architect of the Medici. The *Medici-Riccardi Palace*, which he originally designed for the Medici, was built around an interior court; the exterior, bare and forbidding, is more medieval than Renaissance. Fearing the jealousy of his enemies, Cosimo de' Medici had rejected a more elaborate design submitted by Brunelleschi. The stories on the exterior of the *Medici-Riccardi Palace* diminish in height and the rustication of the stones decreases with each story to avoid monotony. The crowning cornice is one-tenth the height of the building. The *Strozzi Palace* (III. 115) by il Cronaca (Simone Pollaiuolo) is another Florentine example. Boldness as well as grace, delicacy, and an emphasis on detail are characteristic of Early Renaissance architecture.
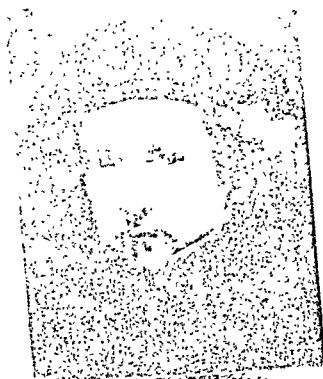
The chief architects of the Italian High Renaissance in Rome were Bramante, Raphael, Baldassare Peruzzi, Sangallo the Younger, and Michelangelo. Architecture expressed through its medium the same balance and repose found in painting. The façade of the *Cancelleria Palace* (Bramante) is undisturbed by strong indentation, but there is variety in space division. Each opening is an individual unit, and a sharp definition of surfaces produces contrasts. As in painting, there are no transitions and modeling is flat and shallow. In the *Cancelleria* and *Farnese* (Sangallo) *Palaces*, beauty depends on a repetition of similar areas, fundamental rectangles are repeated, and diagonals kept parallel. This type of design used in classical art reappeared in the Renaissance. The courtyard in travertine of the *Farnese Palace* was inspired by the Colosseum in the use of the Doric, Ionic, and Corinthian orders. The expression is vigorous compared to the *Cancelleria*; the arches are elliptical to increase the sense

of mass and weight. Michelangelo redesigned the three palace façade of the *Palaces of the Senators* and the *Conservatori* and the *Capitoline Museum*, and placed the equestrian statue of *Marcus Aurelius* in the center of the *Piazza del Campidoglio*. In each façade a single colossal order was used to include two stories. The colossal order became part of the architectural repertoire, and found many imitators. The *Medici Library* and the *Medici Chapel* adjoining San Lorenzo in Florence were designed by Michelangelo. In the latter, coupled, recessed columns suggest the free and ornamental use of the orders as used in the Baroque period.

The church of *St. Peter's* in Rome (begun 1506) had its origin in Pope Julius II's ambition to create the most magnificent monument to the glory of the Papacy and the Christian religion (Fig. 177). A competition was won by Bramante, and the old basilica of *St. Peter's* was torn down to make room for the new church. Michelangelo eventually took over the construction of the dome, which was made the dominant element of the design. The cupola rests on double columns which terminate the ribs; the thrust is resisted by chains placed within the masonry walls. The drum springs from a solid base and smaller cupolas are placed in the corners for transition. The dome is made in two shells, the inner shell is hemispherical, the exterior, pointed. In this dome Michelangelo set a standard for every dome thereafter from *St. Paul's* in London to the *State Capitol* in Madison Wisconsin. *St. Peter's* is the largest church ever constructed, with an area of 18,000 square yards; *Milan Cathedral*, 17,000; *St. Paul's*, 9,350; *Hagia Sophia*, 8,000; *Notre Dame*, 6,000.

h-
ıs

Fig. 209 R...
Grog on Bo...
Gallery of 4... ...
Collection

Falconet: Madam...
...adour as Venus wit...
...es, detail. *Nationa...*
of Art, Kress Colle...

F...
...
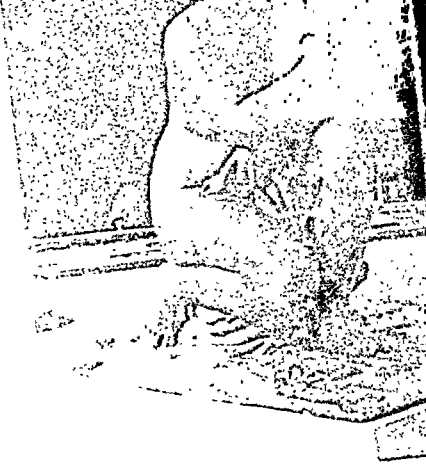
213. Lenôtre. Versailles gardens.
Pan American World Airways
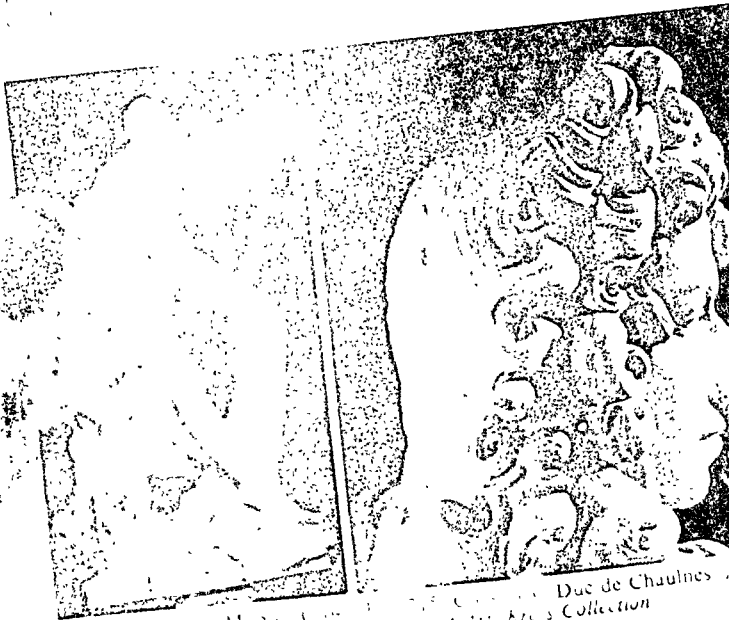
Duc de Chaulnes
Arc's Collection

Fig. 216 Falconet: Madame de Pompadour as Venus with the Doves, detail. *National Gallery of Art, Kress Collection*

Fig. 217 Poussin: Triumph of Neptune and Amphitrite. *Courtesy Philadelphia Museum of Art*
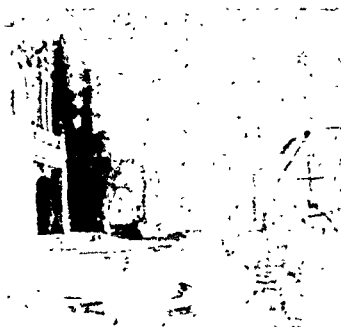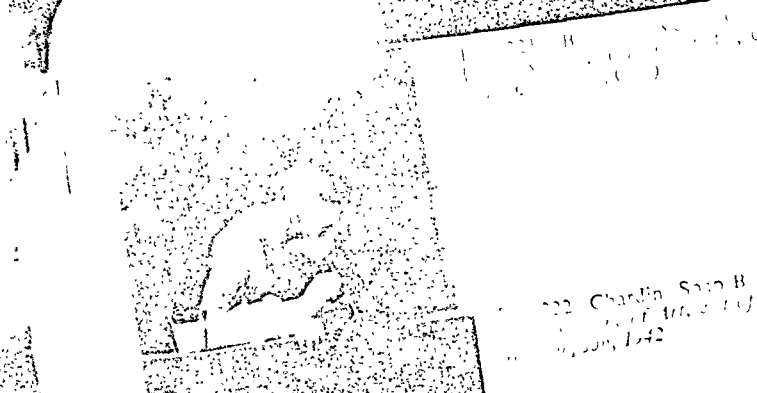

Fig. 218 Claude Lorrain: A Seaport at Sunset. *Copyright National Gallery, London*

Fig. 223 Caffieri (style of) corner piece, lacquered wood. *National Gallery of Art, Widener Collection, 1942.*

Fig. 224 David: The Sabine Women, Louvre. *Archives Photographiques*

Fig. 225 Ingres: The Apotheosis of Homer, Louvre. *Archives Photographiques*

Fig. 219 Louis Le Nain: A French Interior. *National Gallery of Art, Kress Collection*
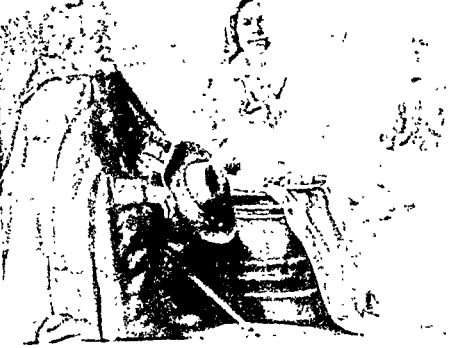

Fig. 220 Watteau: Le Mezzetin. *Metropolitan Museum of Art, Munsey Fund, 1934*

Fig. 221 Boucher: Venus Consoling Love. *National Gallery of Art, Chester Dale Collection, (gift)*.

Fig. 222 Chardin: Soap Bubbles. *National Gallery of Art, gift of Mrs. John W. Simpson, 1942*

Fig. 223 Caffieri (style of) corner piece, lacquered wood. *National Gallery of Art, Widener Collection, 1942.*
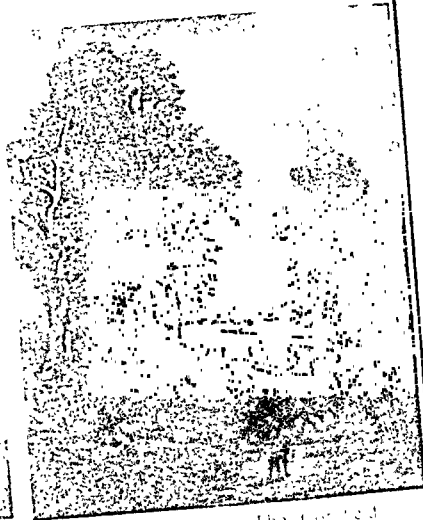

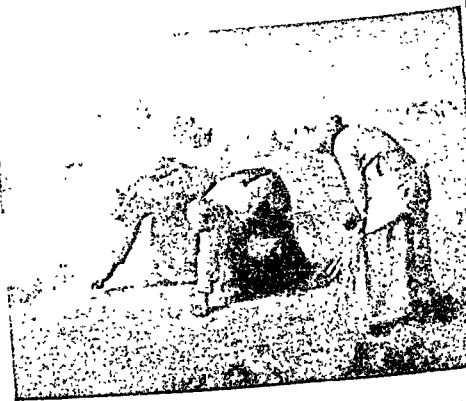Fig. 224 David: The Sabine Women, Louvre. *Archives Photographiques*

Fig. 225 Ingres: The Apotheosis of Homer, Louvre. *Archives Photographiques*

Mar e Louvre deux

Co th e The Co   ed
N and Gallery, Lou

cups, and crosses, engraved and later carved like sculpture. The Saracchi workshop of Milan had an international reputation with the courts of several countries (Fig. 183). In ceramics, majolica in the shape of plates, vases, jars, drugpots, and ewers was painted in a variety of styles and covered with tin-enamel. Italy, Spain, and France developed their own varieties. Italian potteries—such as those of Faenza, Urbino, Gubbio, Deruta, Castel Durante, and Siena—became known for the styles of individual decorators. In ceramics, France developed its Saint-Porchair and Palissy wares and enamel painted copperware, painted in tones of gray with figure decorations, which was produced by Pierre Reymond and others at Limoges. Though glass had been known since antiquity, it was still not common. Iron received its most distinguished expression in elaborately embossed helmets and parade armor made by well-known armorers of Milan and worn on state occasions. In addition to Cellini, there were many other goldsmiths, such as Jamnitzer of Nuremberg and Altenstetter, who was court goldsmith to Emperor Rudolph II. Inspired by a study of antiquities, the Italian Renaissance developed a specialty in medals and plaquettes modeled in relief and cast in bronze by the cire-perdue process (Fig. 184). Perhaps the most distinguished collection of medals, plaquettes, and small bronzes, formerly the Dreyfus (Paris), now the Kress Collection, is at the National Gallery of Art.

Conclusion. In Western art, the Renaissance appears as the period during which painting and sculpture, subordinate during the Gothic period, came into their own, and the personality of the individual artist, formerly submerged, developed for art unprecedented depth and variety.

Sculpture was enriched beyond the stage of development of Greek art through an insistence on what differentiated one individual from another rather than on an emphasis on elements of a common humanity. Since the loss of ancient painting had been complete, the Renaissance created painting for Western art, defined its problems and produced masterpieces which have remained unchallenged.

The Italian Renaissance laid a foundation for architectural ornamentation that remained valid until the advent of modernism in our own period. Art assumed an importance in cultural life to an extent that has not been equaled since. In the expansion of Italian art to other countries, France produced the most attractive adaptation of the Italian style, while Spain and Germany produced the only painters who stand comparison with the great artists of Italy.

Baroque and Rococo Art:

1600 - 1800

Cultural Background. In the Catholic countries, a revitalized Church used art to glorify religion, even though the pre-eminence of the Church as a patron of the arts declined. Art, once the handmaiden of religion, now increasingly served kings, princes, and members of the aristocracy. Absolute rulers flourished during the rise of nationalism, until they were driven out by wars of liberation and revolution in the Netherlands (1648), in the North American colonies (1776), and in France (1789). In the Spanish and Portuguese colonies of Middle and South America, church and state united to create overseas empires. In this conquest, Western Art, through the Spanish and French Baroque, was extended to Latin America and French Canada.

Art broadened its appeal outside of church and court through such painters as Goya, Hogarth, and Rembrandt. In Protestant countries, as in Holland, England, and parts of Germany, the painting of religious subjects ceased entirely. Landscape, heretofore used as a setting for religious topics, was developed for its own sake, and portraiture, which expressed a stately formality during the Renaissance, reflected the individual personality during the Baroque.

During the nineteenth century, the Baroque was looked upon as a period of artistic decadence; Baroque meant theatricality, and its virtuosity was thought to conceal a lack of content. As much of Baroque art was intended to glorify an absolute ruler, it found no favor with the democratic spirit of a new era. But such moralizing against Baroque culture overlooked the vitality of Baroque art. ˈ ˈˈad become aware of the size of the world and thɛ ˌ had revealed the cosmos beyond. The foun. ˑˑ

science were extended; mathematics, the purest of the sciences, invented and developed differential calculus, and music, the most immaterial of the arts, produced such composers as Bach, Handel, and Gluck. Architecture developed into city planning, the first since antiquity. Baroque painting and sculpture reflected the concept of an expanded universe, as medieval art had sought the salvation of the soul.

Characteristics of the Baroque Style. The term Baroque applies to the seventeenth century; the Rococo, a more delicate version of the style, is usually preferred for the eighteenth century.[14] In distinguishing characteristics common to styles in architecture, sculpture and painting, Heinrich Wölfflin differentiated between painterly (*malerisch*) and plastic (*plastisch*). The Renaissance style was classified as plastic (sculpturesque), the Baroque as painterly (pictorial). The plastic character of Renaissance art defined form through contours and solids that appeal to our tactile sense, as in a Raphael Madonna. In contrast, the painterly character of Baroque art softened contours in light and shade, appealing to our visual sense, as in a Rembrandt painting. Baroque painting stressed space and used light and color to "dissolve" form. Sculpture and architecture depended for effect on the use of light and shade. Contours were irregular and the total effect, be it of a sculptural group or of a building, was indented rather than compact and solid. In painting, the "mode of relief" was set aside in favor of the "Venetian pictorial mode" or the "mode of full visual effect." Baroque architecture aimed at dramatic effects and Baroque sculpture portrayed emotional intensity or imitated the startling effects of nature. The skills of reproducing realistic effects in all media were developed to an unprecedented degree.

The Baroque was able to fuse three elements inherited from the past. From the Gothic, Baroque art took over a striving to express the supernatural and an interest in closely observed detail in nature, and from the Renaissance, the Baroque continued the use of Classic forms in architecture.

The Baroque in Italy: Architecture and Sculpture. The Baroque found its characteristic expression in Italy, Michelangelo having supplied the first trend in that direction (see p. 246). Maderna's *Façade of Saint Peter's* (Fig. 185) demonstrated a search for surprises through variations. Adjacent bays differed in the use of triangular and curved pediments and in the contrast of recessions and projections. Balustrades, statues, and sculptured groups above the attic softened the skyline and provided the irregularities the Baroque was so fond of.

Baroque exteriors developed variety by introducing curves

into the plan. The entrance portion of the central-plan domed
church of *Sant' Agnese* (Rome) was recessed through incurv-
ing corners and flanked by towers treated like open pavil-
ions. The orders were used in engaged columns, in pilasters
enclosing arches, and in pediments enriched with carving and
statues (Ill. 119). Variety was obtained through novel combi-
nations, as in the façade of the church of *San Carlo alle
Quatro Fontane*. The main entablature of the ground floor
curved in over the side bays and out over the center. A huge
cartouche crowned the façade between the curved sections of
the crowning entablature (Ill. 120). Both churches are by
the great Baroque architect Francesco Borromini. One of the
most effective of Baroque churches, *Santa Maria della Salute*,

Ill.
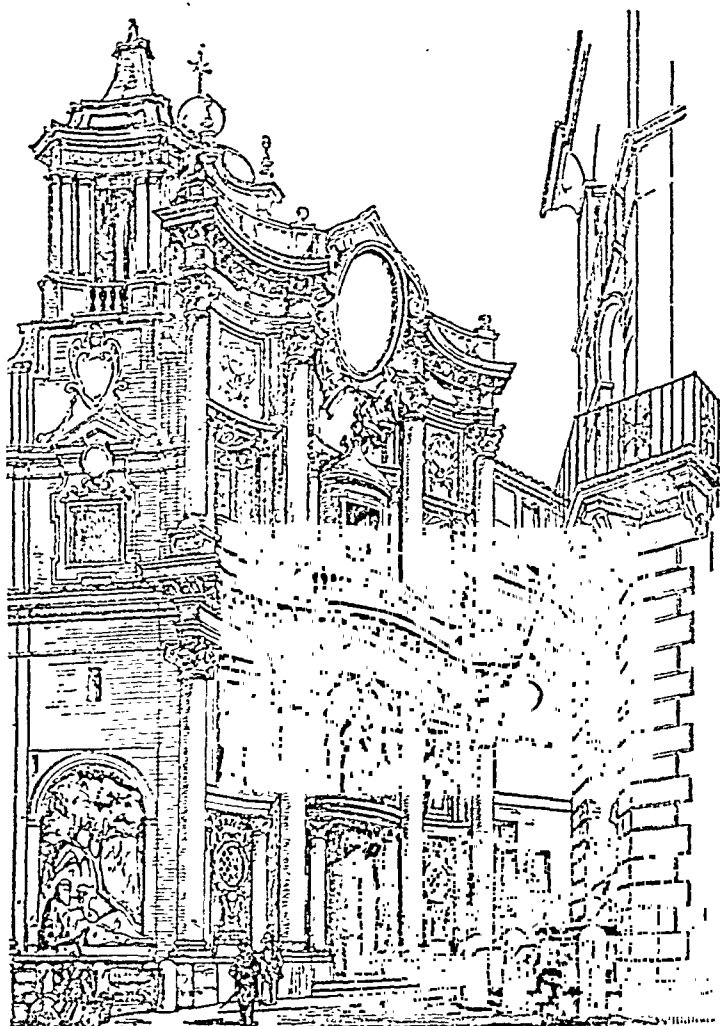
Ill. 120 Church of S. Carlo alle Quattro Fontane, Rome

designed by Baldassare Longhena in Venice, was given a
dramatic location at the head of the Grand Canal. It is eight-
sided, has a central dome buttressed by great scrolls carry-
ing statues, and there is a second dome over the choir. The
exterior furnishes a variety of views, partly due to its prom-

inent location and partly to its complex design. which produces ever-changing perspectives.

The most versatile of Baroque artists was Lorenzo Bernini (1598–1680). In architecture he introduced such novel features as the *Scala Regia* stairs adjoining St. Peter's in which the side walls are not parallel, but converge toward a vanishing point. In the same way, the straight sections of Bernini's *colonnade* adjoining the façade of St. Peter's converge toward the oval-shaped piazza. The Baroque spared no effort to mingle what was real with what was only apparent. In Bernini's bronze canopy over the altar in St. Peter's, the columns twist and bronze consoles. connected by incurving bronze hangings, converge over the center: thus the baldachino was designed of contrasting elements. Placed under the dome of St. Peter's and against a restless and distracting architectural background, only the compelling force of dark bronze could hold its own (Fig. 186). Bernini's most renowned religious work and one of the typical expressions of the Baroque is the altarpiece within a niche representing *The Ecstasy of Saint Teresa* (Fig. 187). A smiling angel holds an arrow pointed at the swooning saint, who is limp and defenseless; a supernatural experience is made so concrete that heavenly bliss is hardly distinguishable from earthly love. The dramatic postures, the drapery broken into torrents of pleats and ridges, marble clouds, and gilt rays are pictorial to a high degree. A colored lighting, reflecting on the group from a concealed source above, adds to the effect. On either side of the niche, members of the family of the donor. carved in relief as if seated in the box of a theater, look down upon the heavenly spectacle. One of the most extraordinary portrait busts of any period is Bernini's bronze *bust of Louis XIV* of France (Fig. 188). Louis XIV represented the height of absolutism in the monarchial system of seventeenth-century Europe, and the bust was intended to give the most elaborate expression to the glorified head of the state. Bernini invented the motif of blown drapery to magnify the impression of grandeur. The false curls are like waves of the ocean, the drapery seems to be slashed by a storm: it is as if only the elements of nature could provide a setting worthy of so colossal a person. Rulers had to be serene like gods, and so the face is calm, like the quiet center of a raging whirlpool.

Academic and Baroque Painting. The Academic followers of the Carracci School—Albani, Domenichino, and Guido Reni—were formerly greatly esteemed, but have ⌒ avor today. The exception is Guido Reni's *Aurora:* it ⸱⸱ at-tractions win this painting a following in all r⸱ ⸱ Bernini was to sculpture, Pietro da Cortona (F⸱

resented in painting; he shared with Bernini a talent for decoration. He was also an architect, and is known for his mural decorations of the Barberini Palace in Rome and the Pitti Palace in Florence. Ceilings were painted as if open to the sky, framed by a simulated architecture with figures enthroned on clouds or surging through space. In the painted sky, the coat of arms of the Barberini family is borne upward, supported, and encircled by mythological figures. For skill, imagination, and a sense of overpowering drive, Cortona's style was completely successful. His style was carried a step further by Andrea dal Pozzo (1642–1709) in the ceiling fresco of Sant' Ignazio (1685) in Rome. In this case, the real architecture of the church is seemingly extended to the open sky through painted columns and arches. From a single station point in the center of the nave, the illusion is complete; the simulated architecture of the ceiling unites with the real architecture into one overwhelming effect (Fig. 189).

Caravaggio (p. 230), named after his place of birth, lived a short but stormy life, during which he created a new artistic style. His influence on European painting was considerable, extending to such artists as Ribera, Velázquez, and Murillo in Spain, to Rubens in Flanders and Elsheimer in Germany, and through Elsheimer, to Rembrandt in Holland. His early manner, represented by a painting of *Bacchus* (Uffizi), was cool in color, porcelainlike in surface, and flat in a precise delineation of areas. Figure and still-life were painted with an objectivity typical of nineteenth-century impressionism. Man was considered as part of the universe, but visually no more significant than the bowl of fruit and the goblet of wine included in this *Bacchus*. In Caravaggio's middle period, as in *The Death of the Virgin* (Fig. 190), illumination was provided for dark interiors by a shaft of light from above. Even in religious paintings, Caravaggio used crowded groups of plainly dressed rough models, selected from everyday life, a kind of realism offensive to the ruling Mannerist painters of the day. The emphasis on expressions of grief was in the taste of the period, but the "bare feet and bloated figure of the Mother of Our Lord" were considered shocking, and this painting was banished from the church (Nikolaus Pevsner). In his *Seven Works of Charity* (Naples), the dark tonality is characterized by night scenes with torch illumination. Figures that are in the path of the light stand out sharply, but most of the action is enveloped in shadow. Caravaggio's illumination of sharply defined contrasts of spots of light and areas of darkness was developed by Rembrandt into a transparency of shadow of greater subtlety.

Caravaggio was a quarrelsome, hot-tempered person who

was in constant trouble with the police due to his aggressive acts, in one case, murder.[11] His talents and good connections, aided by frequent changes of residence, helped to keep him out of prison. Caravaggio's revolution in painting constituted an attack against the established Mannerist School. This attack through the weapons of art against a rival school of painting might have represented an artistic sublimation of his antisocial aggression.

Alessandro Magnasco (1677–1749) was a transitional painter who linked the seventeenth century with the eighteenth. Magnasco's paintings of seascapes represent the agitated forces of nature. In his *Baptism of Christ* (National Gallery of Art), his impressionistic style differed from the scientific impressionism of the nineteenth century by being subjective. The artist was guided only in a general way by natural appearances.

Giambattista Piranesi's most famous etchings, his *Prison Scenes* (*carceri*), are highly imaginative; such prisons never existed except in the mind of the artist, though Roman ruins were suggested in the large interiors and the massive masonry. All plates of the set of fourteen give a sense of tremendous scale, dwarfing the figures, which ascend vast staircases or look down from dizzy heights. Light streams in from above, as it might penetrate into underground vaults.

Venetian Painting. The greatest painter of the eighteenth century in Italy was the Venetian, Giovanni Battista Tiepolo (1695–1770). An inspired decorator, he took over painting where Veronese and the seventeenth-century Roman Baroque painters left off. He covered whole interiors with architectural decorations, including life-sized figures that seem to extend space in all directions (Fig. 191). Tiepolo had complete command of the most astounding problems of foreshortening; his style had gusto and strength without being weighty. Tiepolo introduced a new element in painting—luminosity—and by adding touches of pure red and blue, he made his decorations count as effects of color. In such painted canvas as his *Madonna and the Goldfinch* (National Gallery of Art), Tiepolo represented the climax of Italian Venetian painting. Without Raphael and Titian and the seventeenth-century painters of light, this painting would have been possible, and yet there was no direct imitation, but a fusion in which these earlier ideas have merged.

The best representative of the architectural views (*vedute*) was Antonio Canale, called Canaletto, a contemporary of Tiepolo's and specialized in city views, virtually portraits of cities; Venice was his subject. In his *View of the Ducal Palace*

the picture across a shadow in the foreground. The Library of St. Mark's (p. 247) beyond the palace and the domed church of Santa Maria della Salute (p. 255) in the left distance are shown in contrasts of light and shade. Illumination is used to keep the regularity of architectural forms from becoming monotonous. The effect also depends on painstaking draftsmanship and convincing perspective; the color is conventional. Francesco Guardi represented the same subjects in a light, transparent technique. He painted by hops and skips, with little dots of color for people and lines that skim the surface in quick flashes. Pietro Longhi was a specialist in interiors who painted the diversions of Venetian society at home or at concerts or balls. The small paintings like *The Simulated Faint* (National Gallery of Art) continued the genre tendency of the Dutch seventeenth-century school on a more genteel level.

The Baroque in Germany. The Baroque and Rococo styles were imported from Italy into Germany and Austria and resulted in some exceedingly fine architecture. The numerous absolute rulers of German principalities during the period from 1690 to 1770 aspired to palaces in imitation of Versailles: Zwinger Palace (now destroyed) at Dresden by Mätthaus Poppelmann and the Würzburg and Bruchsal palaces by Balthasar Neumann are examples. Fischer von Erlach and Hildebrandt were the chief Baroque architects of Austria.

The Catholic Church carried through monumental building projects in connection with monastic establishments, with a religious devotion reminiscent of the Middle Ages. The order of the Jesuits was particularly active, and the Jesuit churches in Rome, the Gesù and Sant' Ignazio, furnished the models for other countries. The monastic church of *Melk* (Jacob Prandtauer, architect) dominated the landscape from a cliff above the Danube. Its festive interior of gray marble with gilt ornamentation replaced the largely white background of Italian naves. Balconies between massive Corinthian pilasters in green and gilt suggested the box of an opera. Grandeur in the use of the colossal order and the dome on pendentives was softened by delicacy of detail in sculpture and carving. An effective exterior is the façade of the *church of the Fourteen Saints* (Balthasar Neumann, architect). Classic motifs like pilasters and pediments were used in an original attempt to reproduce the verticality of the Gothic.

Andreas Schlüter created perhaps the best-known Baroque bronze in the equestrian statue of the *Great Elector* (Berlin). It incorporated various influences, including the Roman from the Marcus Aurelius statue. The painted wood sculpture of Bavaria and Austria in church altars is undeniably charm-

ing. The figures of the Virgin, Mary Magdalene, the saints, angels, and representations of the Christ Child are attractive, as if the artists had taken pains to search for beautiful models. Their expressive features register grief, tearful sorrow, or radiant joy. The spread of a hand, the gesture of an arm, and the posture of the figure are lively and graceful. Franz Ignaz Günther (1725–1775), court sculptor, had a large shop in Munich. His *Pietà* and *Annunciation* (1764) at Weyarn in Upper Bavaria represent the Bavarian Rococo at its best. The group of the *Guardian Angel* shows the Archangel Raphael leading young Tobias by the hand. The contrast of the haughty angel and the overawed but trusting youngster is unique in sculpture (Fig. 192).

The Baroque in Spain. Velázquez (1599–1660), a native Spaniard, was made court painter to King Philip IV at the age of twenty-four. Velázquez, the opposite of El Greco, was an objective painter who adhered closely to realistic visual appearances. Much of Velázquez's work consisted of portraiture of persons who were unattractive or even deformed, such as members of the degenerate royal family and the dwarfs and imbeciles kept for the amusement of the court. Through his technique of carefully rendered surface textures, he introduced an element of refinement, and to that extent made them more acceptable. But, in addition, refinement is more or less synonymous with aristocracy. Velázquez may have placed such an emphasis on aristocracy because of an attachment to his mother, who was of an aristocratic lineage and whose name he adopted. From a psychoanalytical point of view, it might be said that by cultivating refinement in painting, he demonstrated subconsciously an attachment to his mother. His life work centered around the portraits of court persons and of Philip IV. *The Maids of Honor (Las Meninas)* represents the young princess and the two ladies-in-waiting, who are so well painted that they have given the painting its name (Fig. 193). Velázquez himself stands at the left, painting the portraits of the king and queen, though they do not show in the picture except as reflected in the mirror. This painting served as an inspiration to the later French Impressionists. The head of *Pope Innocent X* with his piercing eyes and tight lips suggests the crafty and ruthless character of the man (Fig. 194). Through marvelous dexterity, Velázquez has painted an exact equivalent of life. A vivid fusion of form with light and color makes one feel the flesh and bony structure in the arched forehead and flat temples, in the cheeks that recede into shadow, and in the ear, large and rough in texture, that tilts. 'J into the light. The shiny nose has the slickness

soft and atmospheric, with little suggestion of depth (Fig. 195). Goya was an outstanding etcher and lithographer; his series of etchings later entitled *Miseries of War* rank as one of the most forceful indictments against war in modern art.

The age of Philip IV (1621–1668), the Golden Age of Spanish art and literature represented in painting by Velázquez, had its parallel in sculpture. Juan Martínez Montañés (c. 1570–1649) was the greatest sculptor of Seville. In his wood-carved statue of the *Virgin of the Immaculate Conception* in the cathedral of Seville (Fig. 196), the naturalistic figure assumes a monumental character through a voluminous mantle elaborated by a mass of folds. As in Murillo's paintings, the Virgin on a crescent is supported by winged angels emerging from clouds. Like all religious wood carvings of Spain, this statue was painted to add a lifelike quality, as Spanish taste demanded an illusion of reality, particularly in the color of hair and flesh.

Flemish Painting in the Seventeenth Century: Rubens and Van Dyck. Rubens was the last of the great masters to base his art on the human figure. His warm color was inspired by Titian, his expression of force by Michelangelo, and his clouds, flying drapery, and cool colors derived from Veronese. His style became the dominant influence in the seventeenth-century Flemish painting. Broad and expansive, it reflected his own generous and swaggering personality; vitality was its essence, as aristocratic refinement was the keynote of the art of Velázquez. Though Rubens had many assistants in his large studio, a "mass production" process was used only when he had large orders for serial decorations, like those for Marie de Médicis' Luxembourg Palace (Louvre). For most of his sketches and single paintings, it is claimed, Rubens used no collaborators (Leo van Puyvelde). Rubens spent little time on preliminary sketches unless either he or his client happened to be very exacting; his exuberant vitality at times includes an element of coarseness. In his *Castor and Pollux Seizing the Daughters of Leucippus*, two horses, four figures, and a cupid seem to slide into positions that produce effective contrasts and repetition of lines and masses (Fig. 197). If one explores the canvas, the many attractions reveal themselves; the transparency of shadows, the pearly texture of the skin, and the silky luster of blond hair. Canvases like *A Festival in a Garden* (Prado) recall Titian. His *Flemish Kermesse* (carnival) at the Louvre, representing the eating, drinking, dancing, and lovemaking of the villagers, shows his wide range of interests. The portrait of his sister-in-law Susanna Fourment called *The Felt Hat* (195) repre-

sents her as seen by reflected sunlight. The wistful, half-suppressed smile, the cool shimmering flesh tone, and the dash and sweep with which the costume, hat, and background are painted are all admirable. In *The Battle of the Amazons* (Munich), Rubens solves problems of a complex intertwining of figures. His *Descent from the Cross* (Antwerp Cathedral) shows the influence of Volterra's "Descent" in Rome in a vivified, closely packed composition. In a landscape, nature is represented in her most extravagant mood, with a thunderstorm and a rainbow. A shipwreck incident is included, giving the painting its name, *Shipwreck of Aeneas* (Berlin).

Whereas Rubens did not start his career until he was fourteen, Van Dyck at the age of ten was already inscribed in the Guild of Saint Luke and, when he was eighteen, had established a reputation in his own name. Rubens took this precocious painter into his studio without the least jealousy! Van Dyck's style represented an elegant and refined development of the more robust art of Rubens. His activity was divided among Antwerp, Genoa, and London. Van Dyck was technically as skillful as Rubens; his paintings were cooler in tonality, his portraits, more sensitive and intellectual than Rubens', except Rubens at his best. Van Dyck is well represented at the National Gallery of Art; the Italian period in such outstanding portraits as *Marchesa Elena Grimaldi*, the London period by *Queen Henrietta Marie with Her Dwarf* (Fig. 199). In the latter painting, we have the English setting in a park with a background of marble columns and heavy curtains, the silky glitter of costume, the pale complexion, and the languid, aristocratic hands.

Among the astonishing sculptural creations of the eighteenth century are the wood-carved pulpits in Belgian churches—a pictorial realism and a lack of restraint scandalizes "people of good taste" (Paul Fierens). Condemned as monstrous and decadent, these pulpits are not *religious* in the ascetic medieval sense, but close to the spirit of Rubens; they took their cue from Baroque altarpieces. They were not painted; contrasting grains and textures were substituted for pigments. These wood carvings were not intended for the timid, but for devout believers, who would have the heavens descend to earth. Their conception of a heaven was one of an earth overflowing with good things, with fruits and flowers, with saints and angels, and with a Virgin, resplendent, robust, and youthful. Michel Vervoort's pulpit (Fig. 200) in Antwerp Cathedral (1713) includes double rustic staircases, a tree complete with trunk, branches, and leaves, a cock, a peacock, an eagle, a turkey, and a parrot.

Cupids in flight busy themselves with the draped tentlike top. Verbruggen's (1655–1725) *Expulsion* pulpit in Brussels is an explosive burst of opulence and invention, but it is coherent, nevertheless.

The Dutch School of Painting. Certain social changes aided in the development of Dutch paintings. In the Middle Ages, the countryside had not been safe, as highway robbers lay in wait for travelers. In the sixteenth century, the sovereigns put an end to such dangers and a comfortable life in country houses became possible. There were something like two thousand painters and many dealers and middlemen, as smaller canvases for domestic use in small rooms were in demand. Specialization of subject matter began, as individual requirements of the patron had to be satisfied. Painted landscapes recalling the outdoors made life more pleasant during the long winter months. Landscape, interiors, and still life are contributions of the Dutch School. If Italy may be said to have created the grammar of painting, Holland increased its vocabulary.

Dutch paintings were painstakingly realistic. Local color was used, though in a narrow range; subdued greens for foliage and muddy browns for earth and shadows predominate. In a typical landscape by Meindert Hobbema entitled *View on a High Road* (Fig. 201), trees are rendered almost microscopically, as if the painter had attempted to include as many leaves, twigs, and limbs as the canvas could accommodate. The movement of the clouds and the silhouetting of dark trees against a light sky are standard devices.

Jacob van Ruisdael (1628–1682) interpreted landscapes in so poetic a manner that Goethe wrote an article entitled "Ruisdael as a Poet." His atmospheric, moody landscapes are without human figures. In *The Jewish Cemetery* (Fig. 202), Ruisdael painted abandoned tombs, a dead tree, a ruin in the background, a stormy sky, and a brook tearing through the uprooted land, a scene of desolation imbued with melancholy.

Jan Vermeer (1632–1675) of Delft was one of the three greatest painters of the Dutch School. In the Dutch room with their high ceilings and shuttered windows, illumination could be controlled and studied at leisure. Under such conditions, Vermeer produced the full visual Often his costumes introduce a color low, and gray, as in the *Young Wo* *Pearls* (Berlin) and *The Woman Wei* Gallery of Art). Vermeer's interiors ma foot of depth; in clarity and convi have never been surpassed. In the *G*

tional Gallery of Art), there is a lingering suggestion of still life; the immobile features, the smooth surface, and the carefully spotted high lights give this portrait the permanence of inanimate objects. His painting of *A Little Street in Delft* (Amsterdam) is an exact visual reproduction of brick walls; they show the influence of the atmosphere, but nevertheless there is a feeling of solidity. The most spectacular of all of Vermeer's interiors is the *Artist in His Studio*. A model is posed in the cool light of the window in the far end of the room. The sense of depth is extraordinary. Textures suggest the feel and weight of the materials, and the colors are grayed, emphasizing the color harmony (Fig. 203).

Gerard Terborch represented the same type of elegant Dutch room which Vermeer painted. Several figures, often a couple, seem to engage in quiet conversation. In the picture entitled *The Suitor's Visit* (National Gallery of Art), a man in dark costume bows himself into the presence of a waiting lady. Terborch's paintings, like drawing-room plays, take place in the front of the house; for the rest of the house, we turn to Pieter de Hooch. In his painting *The Bedroom* (Berlin), the mother is making the bed; a little girl who opens the door is greeted with a smile. Light streams in through a leaded-glass window, shines on the tile floor, and plays across walls and ceiling. Through an open door, we see a second room into which the morning sun pours in from the back yard. Here we have the spirit of cosy domesticity even where the room is empty, as if the house had a life of its own. Frans Hals (1580-81-1666) had a gift for seizing upon an accidental pose that is spontaneous and expressive of the person he paints (Fig. 204), whereas Vermeer painted his lady as if she were a piece of chinaware. Compared to Vermeer's color, the color of Hals is almost monochromatic. By limiting his palette, using mainly black and white, he could work fast and thus make the most of his sitter's presence. The head is modeled by means of carefully rendered half-tones with crisp touches of light tints placed to define the features. The spontaneous brush work of Hals inspired Manet and Sargent, and Hals became the much-copied master of the impressionistic portrait and figure painters of the latter nineteenth century. His love for gaiety is well known, and many of his paintings reflect his mirth and optimism.

Among the specialists were such painters as Aert van der Neer, who painted landscapes in moonlight, Paul Potter, who created what are virtually portraits of cattle, as in his famous *Bull* (The Hague), Albert Cuyp, who painted cattle grazing. Willem van de Velde (the Younger) did pictures of

misty seas, as in his *Cannonshot* (Amsterdam), and Adriaen van Ostade and Adriaen Brouwer painted peasants. Rembrandt's chief pupil, Gerard Dou from Leyden, painted night scenes with candle illuminations. Jan Steen is known for representations of boisterous family festivities, which often tell a story as well; Kalf for decanters and bowls of fruit with partly peeled lemons; Jan van Huysum, for fruits and flowers. Certain subjects became the specialties of the towns of Holland; in Leyden, a university town, the specialty was books and musical instruments, beer and pipes; in Haarlem, still lifes of food and drink; and in Utrecht, fruits and flowers and paintings of poultry and dead game. The last of the native Dutch School painters was Adriaen van der Werff (d. 1722), who painted Biblical subjects with a smooth enamel-like surface that found many imitators.

Rembrandt (1606–1669) was the greatest painter and etcher of the northern countries and one of the masters of world art. Between 500 and 600 paintings have been attributed to him. Unlike Raphael, he owed little to outside influences; disregarding fashion, he painted what interested him; a variety of subjects, Biblical and mythological, and portraits, landscapes, and animals. A combination of homely realism and subtle spirituality is unique in his work. Rembrandt interpreted the Biblical subjects from a human point of view, which did not always correspond to the traditional interpretation. Judas, the most despised of Biblical characters, was painted by Rembrandt kneeling in anguish, returning the thirty pieces of silver (London, private collection). Rembrandt's concern for man and his emotions is illustrated in his etchings, as in the *Return of the Prodigal Son* (Ill. 12). The scene is pictured at the moment when father and son are reunited. The benign father stoops with deep compassion over the emaciated body of his son; a servant, sensing the excitement, opens the shutter, and the kitchen boy in the hat leans forward, afraid of missing a word of what takes place. All this is in pure etching, without the dry point. *Christ Healing the Sick*, known as the "Hundred Guilder Print," and *The Three Trees* are among the masterpieces of etching.

As the son of a miller, Rembrandt must have his father's mill and seen shafts of light interior. His childhood experience is part us in the atmospheric painting *The Mill* Art), in which the light is concentrated (Fig. 205). His early experience further reinforced by the paintings of van Honthorst, who had been inspired

this painting Rembrandt developed a complex interplay of advancing and receding figures and motifs, like halberds and rifles, that aid in the suggestion of depth of space. Some illumination is natural, but there are also brilliant areas that glow with no apparent source of light. Elements of realism are combined with imaginative additions, as in the costumes that Rembrandt introduced for purely artistic reasons. The painting was not well received. It contained not only the members of the company, but others introduced by the painter for reasons of his own; a portraitlike character was largely absent. The adverse reaction of his contemporaries marked a turning point in Rembrandt's popularity: thereafter his commissions declined. The canvas was later reduced in height and width when transferred to a new location. The Greek story of *Philemon and Baucis* is painted as if Zeus and Mercury had come to visit the humble hut of Dutch peasants. The light from the torch falling upon old beams leaves pockets of darkness in corners and recesses. In Rembrandt's *Self-Portrait* of his late period, the source of light is nearly straight overhead, so that eyebrows and nose cast dark shadows. The farther eye is more shaded than the nearer eye; both are remarkable for clarity and depth (Fig. 207). *Joseph Accused by Potiphar's Wife* (Genesis 39:17-18) tells the story of Potiphar's wife, who, angered by Joseph's resistance to her advances, falsely accused Joseph to her husband. With a complete grasp of the dramatic intensity of the scene, Rembrandt made the woman the dominant figure in the composition. Her discomfort and guilt are expressed in her movement away from the touch of her husband's hand; if Potiphar knew the truth, she would have reason to fear his wrath. Potiphar leans forward; Joseph, merely an incident in this play of emotions, awaits his fate with helpless resignation. Rembrandt modulates his brush work to fit the object represented. Within the pattern of broad surfaces there are places of greater refinement, as in the hands of the nearer figures and the more precisely rendered jewelry. The soft atmospheric effects, with brilliant light grading off through half-tones to dark, create a most varied feast for the eye (National Gallery of Art).

Art in England after the Renaissance: Painting. A native style appeared in England in portrait painting in the second half of the eighteenth century. Van Dyck had created fashionable portrait. Sir Peter Lely of Holland continued Dyck's style from 1641 to 1680, and Sir Godfrey Kneller, German who settled in London, carried manner. Three foreigners, a Fleming, a German, laid the foundation for a native

(1632–1723) were the leading architects. Before Jones, the procedure was for a surveyor to prepare plans and elevations. The surveyors left the details to the craftsmen, who worked them out as the building progressed. Jones was an innovator in that he designed the whole building, including ornamental details. He introduced the Palladian style to England with the *Queen's House* in Greenwich and the *Banqueting Hall* of the Whitehall Royal Palace. By adopting the more severe classic style of Antonio da Sangallo and Bramante, England escaped the Italian Baroque of Borromini and Cortona. By the time Wren had developed design in the Renaissance manner, carvers like Grinling Gibbons had been trained to carry out the details. Wren was a professor of astronomy at Oxford before he gradually acquired a knowledge of architecture. The two-story façade of *St. Paul's* (London), a mask for buttresses, is well proportioned and faultlessly designed. The wood and lead dome is effective, but does not correspond to the interior. Many of the city churches rebuilt after the London fire (1666) were Wren's designs, like St. Mary le Bow and St. Brides, Fleet Street. They have stone spires over 100 feet high. *St. Martin's Ludgate* is one of the simplest and best. American Colonial churches derive from the Wren tradition

The Baroque Period in France. The Age of Louis XIV represented the culmination of French art. The newly created Academy of Painting and Sculpture became the ruling body, replacing the guilds, which had been independent up to this time. The direction of the development of art was centralized in the persons of Colbert, Lebrun, and Poussin. Only members of the Academy could exhibit in the Salon; state representatives judged competitions, selected artists, and decreed royal pensions for state artists. Artists were housed in the Louvre and sent abroad to study, and foreign artists were imported. The French Academy was a school created in Rome to establish principles of good taste and to place "firm ideals" before the young generation of artists. Charles Lebrun, first painter to Louis XIV, lived at Fontainebleau with the king, who spent much time in the artist's studio.

Economic Background. As art seemed to create high values out of comparatively inexpensive raw materials, art was thought to add wealth to the country. Articles of luxury and expensive festivals seemed to the ruling aristocracy not only pleasant, but a help in supporting a sound national economy by keeping the money in the country. However, too much energy had been diverted into the construction of palaces and away from improving the standard of living of the peasants, merchants, and mechanics who produced the

Fig 230 B...
...our... M
...ane... Lei

Fig 231 Renoir, Terrace B...
The Concert. M...
H Wade C...

Fig 232 Mo... M... ...M... ...
the Willows. N... G...
Chester Dale Coll...

Fig 233 Seurat, Sunday Afternoon
...the Grande Jatte detail. Courte...
...our the Institute of Chicago. Helen
B... B... on Memorial Colle...

Cézanne, Still Life, Na-
of Art, Chester Dale

Gauguin
National Gallery
Dale Collec

Fig. 244 Maillol. Desire, plaster relief.
Collection of the Museum of Modern Art

Fig. 246 Whistler: Arrangement in Gray and Black. Louvre. *Photograph, courtesy Museum of Modern Art*
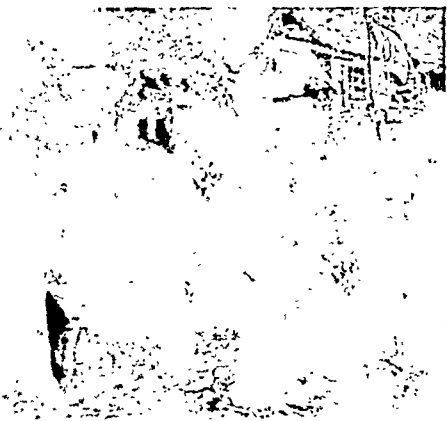
Fig. 247 Quidor: The Return of Rip Van Winkle. *National Gallery of Art, Mellon Collection, 1942*
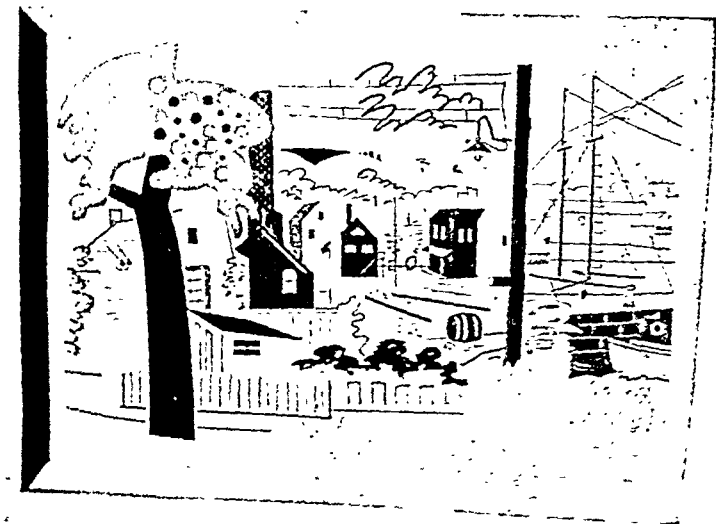
Fig. 248 Davis: Summer Landscape, 1930. *Collection of the Museum of Modern Art*

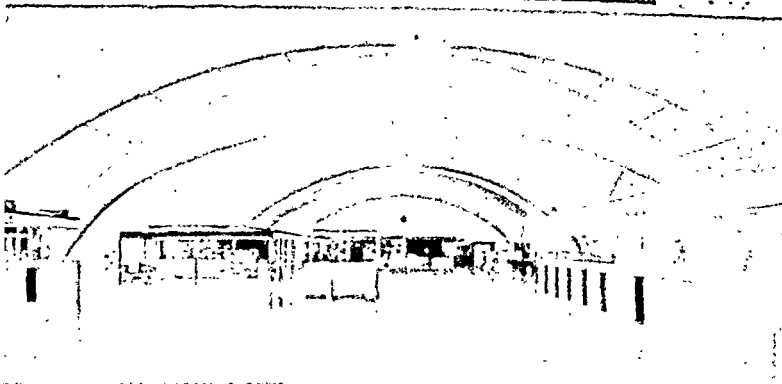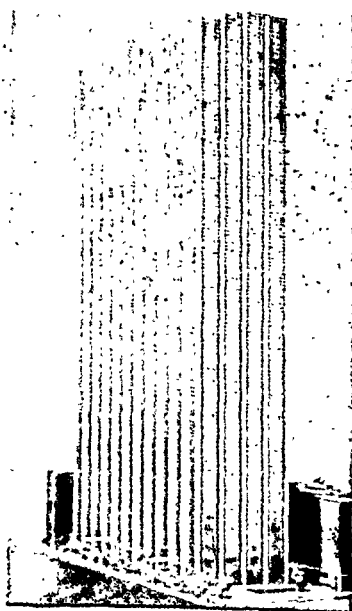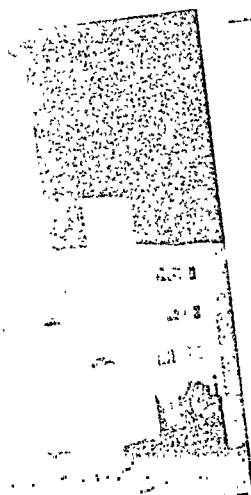1982 Courtesy Art Museum
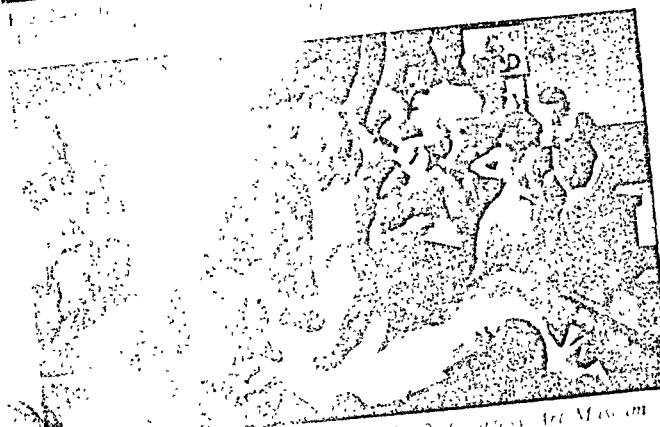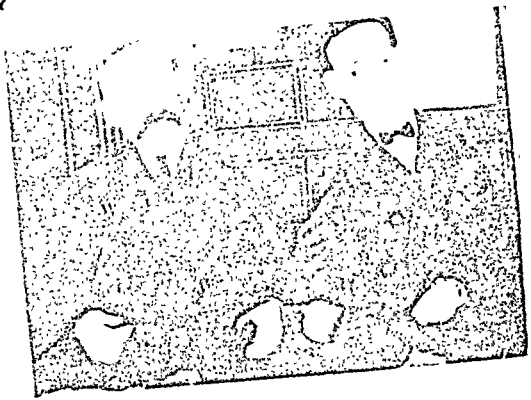
Fig 251
and Var
of the V
ern tr
John D

Fig. 253 St. Louis Terminal Building Lambert St. Airport. Hellmuth, Yamasaki and Leinweber, Architects. Photograph, courtesy Eastman Kodak Company

Fig. 254 Steuben Glass, Inc Laurencin: Glass Urn. Co: Glass, Inc.

necessities. The spending of vast sums on extravagant art projects contributed to the economic unbalance which ended in the French Revolution.

Architecture and Sculpture. Claude Perrault's design for the *East Façade of the Louvre*, with its fine repose, elegant detail, and fluted columns contrasting against plain walls, had a strong influence on French architecture. The *Apollo Gallery* of the Louvre, now used for exhibiting works of art, was designed by Lebrun and named after Louis XIV, the "Sun King," as Apollo was the Sun God. Piers and architraves support a cornice and a barrel vault; five main panels on the ceilings have paintings by Lebrun. Though the style of the Italian Baroque was modified to conform to French taste, this gallery is most ornate, a blaze of gilt and ivory, with blue accents.

The Palace at Versailles, the residence of Louis XIV and the seat of government, was designed for a court of 10,000 persons. The garden façade, its total length over 1700 feet, has 375 windows. During the French Revolution, the original furniture was sold and the pictures were placed in the Louvre; in the nineteenth century, Louis Philippe made Versailles over into a museum (1833–1837). The palace's *Hall of Mirrors* (1680–1684), decorated by Lebrun, was executed largely in white marble panels, green marble Corinthian pilasters and gilt bronze capitals. The barrel-vaulted ceiling was decorated with paintings. The gardens by André Lenôtre are on a vaster scale than the Italian gardens, and are united architecturally to the palace (Fig. 213). Terraces form transitions from palace to the garden, diagonal vista lines converge on points of interest, there are fountains and a canal nearly a mile long, used for pleasure boats. Court etiquette prescribed wigs and high-heeled shoes and an elaborate ceremonial for state occasions; the classic dramas of Racine and Corneille were declaimed in stately fashion. The garden reflected the artificiality of the period; hedges formed walls and halls of green for outdoor theatrical performances and trees were cut into shapes of cubes, cones, and spheres. Lenôtre remodeled the gardens of Fontainebleau, Tuileries, Vaux, and designed Saint-Cloud. His pupils and imitators laid out gardens in England, Germany, Portugal, Russia, and elsewhere. Pierre L'Enfant's plan for Washington, D. C., owes something to Versailles.

The Tomb of Richelieu (1694), probably designed by Lebrun, represents Richelieu on a raised pedestal-like couch as he sinks, dying, into the arms of Religion, while at his feet the figure of Science crouches in grief. Technically the execution is superior, but the billowy draperies of the Italian

(1732–1806) represented the same subjects with equal success. He also painted for Madame du Barry and is well known for the decorative panels he did for her, now in the Frick Collection (New York).

Jean Baptiste Chardin (1699–1779) painted still life and interior subjects from the lower middle class. He developed his own technique, in which he aimed for broad masses and paid as much attention to design as to color. Often a subject was painted several times, so that subsequent versions show a matured, simplified interpretation. Chardin's paintings of orderly everyday existence were just as French as the boudoir paintings of the court. In his *Soap Bubbles* there is something genteel and distinguished which makes it different from Dutch paintings (Fig. 222). The large surfaces in neutral tones are enlivened here and there by warm touches of sunshine and bits of foliage. In a subtle way they relate the scene to a wider world beyond. With Chardin, we begin to sense the closeness of the eighteenth century to our own period.

Decorative Arts. The changes in the style from Louis XIV (Baroque), to Louis XV (Rococo), and to Louis XVI (Neo-Classic) are most apparent in the decorative arts, which include interiors. Baroque architecture virtually transferred the designs of the façade to the interior, where the same orders were repeated. With few exceptions, the Rococo expressed itself on interiors only. Pilasters and cornices disappeared in favor of a free merging of wall and ceiling in curvilinear scrolled motifs in plaster or wood, painted and gilt. Plant and floral designs fused with curves, shells, garlands, sprays, and tendrils in a fanciful but orderly manner. Walls were divided into panels which often contained mirrors, paintings, or tapestries framed to harmonize with the wall decoration.

The characteristic piece of furniture of the Louis XIV style, perfected by Charles André Boulle, was the tall cabinet of ebony; it was inlaid with brass and tortoise shell, giving an effect of somber splendor. Wood marquetry at times replaced tortoise shell. In the time of Louis XV the gravity in etiquette and in decoration gave way to lightness. In one type of furniture, black lacquer covered the structural base as a thin layer, elaborated with bronze mounts called ormolu. Chinese porcelain vases for mantel ornaments over the fireplace and Chinese motifs in ornamentation became popular (Fig. 223). Under Louis XVI and Marie Antoinette, the Classic manner returned; straight lines again replaced curves. This later phase produced magnificent furniture in

which colored lacquer and porcelain plaques were added to marquetry and ormolu.

Conclusion. The two centuries between the end of the Renaissance and the French Revolution marked a culmination for sculpture and painting. The classical heritage, developed by the Renaissance, achieved its most vital expression. In sculpture, the possibilities of the medium were extended to the utmost; in architecture, the classical orders were enriched through the use of curves and a striving for effect of light and shade. Painting further developed its style and in subject matter added new categories. In the largest projects painting, like architecture and sculpture, engaged many assistants under the direction of a master. Paris superseded Rome as the art capital of Europe, and under royal patronage France made the arts a function of the state. The major arts, still united, aimed to glorify the client as much as to set a memorial to the artist. Bernini and Rubens reflected the past brought to new heights. Velázquez and Vermeer were their equals, but included in their styles elements that pointed to the future. The century that witnessed the greatest control of art under a monarchy in France, in Holland produced Rembrandt, one of the most individual artists of any period.

Modern Art in Europe:

1800 - 1950

Cultural Background. The French Revolution had a profoun
influence on the minds of men everywhere. A new emphas
was placed on individuality, though the force of traditior
in customs and in art subsided only gradually. The freein
of men's minds was accompanied by the industrial revolutio
Trains, transatlantic liners, airplanes, the camera, and mo
recently radio and television put an end to isolation ar
made possible the one world of today. These changes
environment were reflected in art, which lacked unity un
the style finally matured in the twentieth century. Heretofo
there had been but a single style for each period; now the
were several styles, concurrent and also one superseding tne
other. Art was approached from the point of view of im-
provement, though what appeared to contemporaries as prog-
ress seems in retrospect more like a succession of changes.

Formerly artist and craftsman had occupied a position of
security in society. Art during the Baroque period had tended
to become a luxury product, but it was produced by artists
under contract. After the aristocracy lost power, artists had
to depend on a new public and a free market to sell what
they had produced to please themselves. With the disappear-
ance of a single accepted style, artists divided into hostile
factions and the bond of a common understanding which
formerly had linked artist to patron also disappeared. Even-
tually this led to an estrangement between art and public
and the misunderstood artist, despising a seemingly uncul-
tured public, raised the cry, "art for art's sake" (*L'art pour
l'art*). The conservative, or academic artist fared better eco-
nomically than the radical who pursued new ideals of his
own choosing.

ture had its parallel in painting's search for subjects. This began with a return to classical antiquity, the taste for which had begun in the mid eighteenth century with the rediscovery of Herculaneum and Pompeii and Winkelmann's *History of the Art of Antiquity*. The period style of Louis XVI had already concentrated on this new fashion. After Napoleon's rise to power, Neo-Classicism found its chief promoters in David and Ingres. Thomas Couture dealt with ancient history (*The Romans of the Decadence*) and Jean Louis Meissonier dramatized Napoleon (*1814, Napoleon in Russia*) and his pupil Edouard Détaille, the Franco-Prussian War (*The Dream*). Religion found a fashionable interpreter in Adolphe William Bouguereau (disliked by modernists), as in his sweet and sentimental *The Virgin as Consoler*. Bouguereau and Alexandre Cabanel both painted a *Birth of Venus*, one vertical and one horizontal, fusing all preceding styles, including those of Boucher and David.

The second half of the nineteenth century turned away from a literary type of subject matter and sought a closer attachment to nature. The peasant was idealized by Jean François Millet and landscape by Jean Baptiste Camille Corot. Gustave Courbet, the realist, sought by his paintings to shock his generation into accepting his idea that the beauty of art and the realities of life should be one. Edouard Manet and the Impressionists represented the figure as part of the natural environment in the still-life manner of Velázquez and Vermeer. Claude Monet and Camille Pissarro went a step further by eliminating the human element and by painting the landscape as reflecting surfaces. Edgar Degas concentrated on the figure in motion, and Auguste Renoir specialized in women and children suffused in light and color.

Paul Cézanne represented a turning point; the last vestige of Renoir's loveliness of natural appearances disappeared and a formalizing impersonal geometric trend set in. Vincent van Gogh added brilliant color and technique, a personal contribution derived from the unconscious drives of his neurotic personality. Georges Seurat, Paul Gauguin, Toulouse-Lautrec, and also Henri Matisse emphasized the larger pattern that gave their canvases a decorative quality. The geometric basis of Cézanne became the dominant note of Cubism, as in Georges Braque, Fernand Léger, and in one phase of Pablo Picasso's works. Natural appearances were subordinated by the Expressionists who rearranged the visual facts. All resemblances to recognizable objects vanished in Kandinsky, who constructed his paintings out of color and complex effects of voids, transparencies and solid forms. Never before had an art so completely transformed itself as painting

more life than David would have approved of, as in the spontaneous pose in the portrait of his friend *Bertin* (Louvre, 1832).

Romanticism. The Romantic movement was contemporary with Classicism and lasted in France from the fall of Napoleon (1815) to the Franco-Prussian War (1870). Théodore Géricault (1791–1824), Eugène Delacroix (1799–1863), Honoré Daumier (1808–1879), and Jean François Millet (1814–1875), of a later trend toward realism, were the chief representatives in France. Emotion and color, despised by the Classic painters, became the new objectives. Subjects were still selected with care and an heroic element was stressed, often based on the Romantic poets, and Shakespeare, Tasso, Goethe, or Dante. Dramatic action was preferred to absolute beauty; the mysterious, the fantastic and morbid, and pathos and tragedy became acceptable. Painting out-of-doors began and brush work and effects of light and shade replaced line and sculpturesque modeling. The battle of the Classicists and Romanticists centered around the Academy and the Salon Exhibitions. The revolution of the Romanticists was set off by Géricault's *Raft of the Medusa* (Fig. 226) at the Salon of 1819. This represented a scene that had actually occurred. Survivors of the shipwreck are grouped in various stages of exhaustion; bodies dead or dying are about to slide off into the turbulent sea. To study the effects of exposure, Géricault had visited hospitals. He had the carpenter from the *Medusa* construct a model of the ship's raft for use in his studio. The picture, proclaiming the freedom of the artist, set itself in opposition to Classicism and aroused a storm of abuse. Géricault's stand against authority in painting may also have expressed his own rebellion against his father, against whose wishes he had secretly studied painting. After Géricault's death at thirty-three, Romanticism was taken over by his friend, Delacroix, a gifted musician and author of the *Journal*, a notable contribution to art criticism. Delacroix revered the masters of the past; his struggle was against the stifling influence of the Academy. His style represented a fusion of the art of Rubens, Titian, and Tintoretto, with an emphasis on objective reality and glowing color. Delacroix, son of a revolutionist, sympathized with the struggle of the Greeks for independence. The brave *defense of Missolonghi*, an incident in this war, Delacroix personified by a figure amidst ruins pleading with outstretched arms for sympathy (Fig. 227). An ominously dark background brings out the figure in native costume illuminated from above.

Daumier (1808–1879) took advantage of the new lithographic process introduced from Germany and became the most formidable caricaturist of the century. Daumier sat-

green, diffused atmospheric color that gives his painting a soft, misty appearance which became popular with American collectors. Millet painted the peasant as the heroic tiller of the soil. His broad, massive figures are placed outdoors, exposed to light and atmosphere. *The Gleaners* (Fig. 229) who gather in the last bit of grain, and *The Angelus* (Louvre), peasants stopping work for a prayer at the sound of the church bells, are among his best-known works.

Painting Outside of France. John Constable (1776–1837), who concentrated on the native English landscape, became the founder of modern landscape painting before the appearance of the Barbizon School. He exhibited in Paris in 1824, and French painters admitted their debt to Constable. His dark tonality was reminiscent of Hobbema. Through large brush marks, he fused ground, foliage, and sky into a unit. His *Cornfield* (Fig. 228) is a carefully composed picture that combines the heritage of the old masters with a new appreciation of atmospheric effects. Joseph Turner (1775–1851) made light, space and atmosphere his subject matter. Ruskin placed Turner, as the master of diffused light, on a level with Michelangelo, master of form. In Turner's late work exhibited in 1844, *Rain, Steam and Speed*, solidity of form is lost in a colored mist that obscures the sun. Turner worked indoors freely from his own imagination, but he derived his visions from nature. He anticipated the impressionists without sharing their objective approach.

In the second half of the nineteenth century, England also produced Dante Gabriel Rossetti and Sir Edward Burne-Jones, members of the Pre-Raphaelite group that revolted against the conventional style of their day. Their subjects were legendary, mystical, and poetical, and at times religious. Such works as the *Golden Stairs* by Burne-Jones long retained popularity and became well known through reproductions.

Germany too had its Classic and Romantic painters. Among the latter, Philip Otto Runge and Caspar David Friedrich produced a peculiarly German variety of Romanticism. Such painters as Spitzweg, Schwind, and Richter stressed a poetic approach in subjects from folklore and German life. The German Romantic painters were not innovators in the manner of the French, and their leading art schools of Munich and Düsseldorf, as attractions for foreign students, never rivaled Paris, where Germany also sent her young artists. An exception to this dependence on Paris was the German-Swiss painter Arnold Böcklin (1827–1901). He was not only a Romantic painter but also a poet who filled his colorful land and seascapes with Nereids, centaurs, and tritons of convincing vitality. His *Isle of the Dead* (Fig. 230) was a poetic invention of his imagination. The overwhelming influence of

was a new version of Giorgione's *Concert*, but its modern style and contemporary setting invoked a storm of criticism. In his *Olympe* (Louvre) showing a nude on a couch receiving a bouquet of flowers from a Negro maid, the appeal was based on subtle variations of color and design. The public did not react to its artistry, claiming that the figure was too nude and her expression, stupid. Manet covered a wide range of subjects: portraits, still lifes, landscapes, interiors, horse races, and boating scenes. There was no single focus, and figures were related to suggest momentary groups.

Auguste Renoir (1841–1919) retained something of a preciousness of surface, the pinks and ivories which he had absorbed in his youth as a decorator of porcelain. To retain form, not to dissipate it, was his aim. Renoir was essentially a figure painter, and by subordinating head and face, his paintings appear wholly unintellectual, as in his *Three Bathers* (1897), here in bluish flesh tint heightened with pinks. (Fig. 231). His light and airy canvases, nudes reflecting a warm glow mingled with pearly iridescence in the shadow, clearly denote his joy of life—a modern Boucher. This unproblematic and charming art of Renoir enjoys uncontested popularity.

Edgar Degas (1834–1917), the draftsman of the Impressionists, preferred pastel. He used photography as an aid in studying the figure in motion and he made numerous studies of the same motif. His dancers, as in *The Ballet Girl Fixing Her Slipper* (Fig. 238), and his race course scenes, are studies of movement. The general trend toward realism is demonstrated in Degas's treatment of both the ballet dancers and the laundresses as working people. Though he was fascinated by the glamor of the theater, many of his studies show the dancers in awkward postures emphasizing the strenuous training required of them.

For Claude Monet (1840–1926), the Impressionist landscape painter, the objects that reflected the light were less important than the quality of the light itself. In order that the light be recorded on canvas correctly, he painted series of the same object under different light, as in his haystacks, water lilies or in his twenty canvases of Rouen Cathedral. In *Madame Monet Under the Willows* (1880), the figure is blurred, the meadow is a loose texture of green, spotted with transparent shadows and warm reflected sunlight. Brush strokes and pigment squeezed onto the canvas directly from the tube combine into a light fabric (Fig. 232).

Impressionism deprived form of its substance, so that painting came closest to the ethereal quality of music. Courbet in painting is a parallel to Zola in literature, and Monet

Paul Gauguin (1848–1903), friend of Van Gogh and other of the Post-Impressionist painters. In his Self-Portrait (1889), the head without body protrudes from a background of yellow, symbol of envy, and red, symbol of love (Fig. 236). He gazes disdainfully upon a distraught soul out of which a serpent, symbol of evil, coils between his fingers, as saintliness, a halo, hovers above. This early portrait, a posterlike decoration, is said to have been painted as a satire on himself as the Messiah of a new art. What troubled the artist—if his painting is a confession—may go back to an earlier period in his life. Any psychological interpretation must remain conjectural, due to our limited understanding of the artist and the emotional experiences he went through.

Gauguin is best known for his South Sea subjects painted in Tahiti. He used the island landscape and brown-skinned Polynesian people as subjects, injecting native sentiment. His slowmoving, languid rhythms in glowing color seemed exotic when shown in the capitals of Europe. Born in Paris of a Peruvian Creole mother, Gauguin spent some time in his early youth in Peru. At the age of thirty-two, he gave up a successful business career in exchange for a precarious life as a self-exiled, starving artist. His flight to his oceanic paradise has been viewed as a rejection of decadent Europe in exchange for a healthy life among the primitives. It is more likely that Gauguin's strange action was determined by personal motivations rather than merely a dislike for civilization.

Neo-Impressionism. This was a short-lived experiment based on the science of optics of Chevreuil. Small spots of pure colors were placed mosaiclike on the canvas on the theory that complementary colors at a proper distance fuse in the retina of the eye. Its purpose was increased luminosity. Georges Seurat (1859–1891), the chief painter of this divisionistic method (pointillism), produced some fine paintings. This was due to the fact that he was an excellent designer rather than a result of his scientific experiments with light, as is shown in his Sunday Afternoon on the Grande Jatte (Fig. 233), painted between 1883 and 1886.

Toulouse-Lautrec (1864–1901) was a great illustrator and creator of the modern poster of the late nineteenth century. He sought out the cafés, bars (Fig. 239), and dance halls; the fin de siècle night life of Paris lives again in his paintings and pastels, executed with breadth and vigor.

Abstract Traditions. A trend toward abstract art had its origin in Cézanne and Seurat on the one hand and in Gauguin and Van Gogh on the other. The Cézanne influence led to an intellectual geometric style illustrated in Cubism

horse, stabbed, shrieks out in pain. Pegasus, muse of the
Muses, is slit and slashed paper-thin. If this canvas
suggests anything, it is newsprint, the morning paper torn
in anger to fantastic bits. How often the world seen
served to us in that fashion: tragedies real about seem as
unreal as these painted shapes. Perhaps this is a measure of
bitter irony at man's limited comprehension, his lack of true
passion, his self-protecting isolation against the meaning of
Guernica. This is an empty, cruel world lacking human
and subject to destruction: black, white and gray alone
convey the feeling of mourning (Fig. 241).

Non-Objective Painting. By 1913 Wassily Kandinsky
(1866–1944), a Russian, had eliminated all semblance of
natural objects. His paintings bear no title; this one is
identified as 255 (Fig. 240). Its fresh green background ar-
rests attention, but even the black-and-white reproduction is
exciting with its large scale, its clearly stated masses of
foreground and distance, and its different shapes and kinds
of lines. Associations may be dimly suggested, but bear no
obvious comparison with nature; the painting has a right and
bottom and a top. Kandinsky founded a new group in
1911 called *"Der Blaue Reiter"* (The Blue Horseman). and
was joined by Paul Klee, a Swiss, and Franz Marc a Ger-
man. Some of Klee's drawings or water colors bear a resem-
blance to children's drawings. They are small in scale and
have little substance. His oil painting *Around the Fish* (Fig.
255) appeals by its invention and variety of shapes and its
precision of technique. Its calculated space relationships
seem free, and yet any change would disturb the balance.

Expressionism. This was essentially a German phase,
emotional rather than intellectual. The group was organized
under the name "The Bridge" (*Die Brücke*) in Dresden in
1905, and included Erich Heckel, Karl Schmidt-Rottluff,
Emil Nolde, Ernst Barlach, Ernst L. Kirchner and Max Pech-
stein. The woodcut of Nolde's *The Prophet* (Ill. 123) suggests
a dynamic spirit oriented away from reality. Of gigantic
stature was Käthe Kollwitz, the most moving graphic
artist of modern Germany. As wife of a physician who lived
in a working-class section of Berlin, she was in close touch
with the poor, before and after the First World War. In
lithographs, woodcuts, and etchings, she poured out her
sympathy with the grief and desperation of the suffering
people in moving documents. *The Parents* lament the loss of
their son in war (Ill. 125) and children with starved faces
look to their mother for bread. George Grosz (1893–1959) in
a drawing entitled *Cannibal in Modern Dress* (Ill. 124) shows
us a well-nourished Nazi profiteer amidst bones and skulls
against an industrial background. The most devastating

satirical artist of his era, he castigated unmercifully the evils left in Germany in the wake of the First World War. Max Beckmann's triptych of the *Departure* (1932–35), smuggled out of Germany, dealt with another nightmare of Nazi tyranny. The quiet triumph of the central panel, with its blue water and light sky, compensates for the oppressive side panels. The crowned figure raises his hand in farewell,

Ill. 123 Nolde: The Prophet. *National Gallery of Art, Rosenwald Collection*

as the hooded one lowers his arm to symbolize the tyrant's downfall; the sentimental men gaze back, but the woman, child in arm, courageously looks ahead.

Matisse and the "Fauves." As the German Expressionists were organizing, Paris was featuring Henri Matisse, André Derain, Georges Rouault, and Maurice de Vlaminck at the "Salon d'Automne" (1905). They became known as *Les Fauves* (wild beasts) due to their "wild" color and uncouth vigor. This was illustrated in the work of their leader, Henri Matisse, whose *Woman with the Hat* shocked everybody. Matisse (1869-1954) had studied law in Paris before his father finally permitted him to study art under Bouguereau, who said that his pupil would never learn to draw. His second teacher, the liberal Gustave Moreau, gave him intelligent encouragement. The sensuous appeal of the *Odalisque with Raised Arms* (1920, reproduced on the back cover), is typical of Matisse, to whom painting meant relaxation. Matisse emphasized color, design, and pattern, often introduced as textiles, in ever-varying combinations; volume, depth, and space were often minimized. Many of his paintings are flat decorations, with vibrant color and breadth of pattern (*Egyptian Curtain*); others show bold, curvilinear rhythms (*Lady in Blue*), or at times massive compactness and spatial re-

istic painting appears self-conscious, though Surrealists claimed to explore the unconscious through "dreams and hallucinations." The contribution from the unconscious is comparable to Neo-Classic subjects in David or Romantic subjects in Delacroix. There was no Surrealism before Freud and psychoanalysis became known. Surrealist tendencies were discovered in the art of the past where they probably did not exist, as in Bosch. On the other hand, the unconscious has played a part in artistic creation, and at times has made itself felt in the work of the artist, but not as deliberately as in the professional Surrealists of our own day.

Max Ernst (b. 1891), a self-trained German artist and student of philosophy, was a natural Surrealist. In his early youth he made rubbings from the wood grain of a mahogany plank and studied leaves for their network of veins. He discovered patterns in natural materials, just as Leonardo had. Another approach was to study the illustrations in commercial catalogues of scientific implements and materials from mineralogy and anthropology. By drawing backgrounds on the printed page suggesting sky or horizon, Ernst united irreconcilable objects, such as parts of machinery standing in a desert. From such studies, he created his paintings and influenced the Surrealists.

Sculpture. Neo-Classicism produced the Italian sculptor Antonio Canova, the Dane Bertel Thorvaldsen, the Englishman John Flaxman, and others in Germany and Austria. This was followed in all countries by numerous statues of generals and poets done in a style influenced by realism. Antoine Louis Barye produced some fine animal sculpture, and Jean Baptiste Carpeaux's decorations of the Louvre were related to the Baroque. Impressionism in sculpture found its interpreter in Auguste Rodin (1840–1917). By leaving parts of the unfinished block from which his figures emerged, the contrast of the rough marble with the sensitive modeling of flesh and bone gave his work a living quality (Fig. 242). Aristide Maillol (b. 1861) emphasized repose and massiveness of form. In his plaster relief *Desire* (Fig. 244), solidity is close to archaic Greek sculpture without its stylization. The Belgian sculptor Constantin Meunier (b. 1831) specialized in figures of miners and found inspiration in the hardened muscles of the body used to p... toil. Like Millet, he brought out the dignity of labo... Yugoslav Ivan Meštrović (b. 1883), the archaic G... became a potent influence. Post-Impressionis... represented by the Rumanian Constantin Russian Aleksandr Porfirievich Archipe... treatment and sculptural bulk replaced na...

anier). His primeval forests with wild beasts, sleeping beauties, and tapestrylike foliage backgrounds are universal favorites. The Italian Amedeo Modigliani (1884–1920) developed a linear style of elongated figures, flat or modeled in light tints, orange, black, blue, and green. Long verticals or diagonals set against undulating curves contribute to his distinctive style. Giorgio di Chirico (b. 1888) was born in Greece of Italian parents and studied in Munich, where he was influenced by Böcklin. In his *Nostalgia of the Infinite*, the high sky is partly obstructed by a massive tower, and the lonely can't middle ground is separated from the foreground by a deep below. A flood of light on the side of the tower suggests a values beyond, but a high wall cuts us off from its source. The title expresses what the painting conveys, nostalgia, a longing mingled with pain. In *The Village and I* (1911) the Russian Marc Chagall (b. 1887) combines reminiscences from his native village, the street, a milking scene superimposed on a cow's head, a profile head —all in vivid pink, green, gray, and white. Yves Tanguy's landscapes, filled with unreal creatures, have an other-worldly fascination. Whether glimpsed from the depths of the ocean or from another planet, the subject matter is unfamiliar but not irrational, and the style violates no principle of accepted aesthetics. His titles, such as *Four O'clock in Summer*, *Hope* or *Mamma, Papa Is Wounded* add to the mood of strangeness. Joan Miró (b. 1893) is playful and childlike in the *Circus* (1934) and precise and intellectual in *Maternity* (1924); his paintings call for no psychological interpretations.

Dada and Surrealism. Dada was started in a cabaret in Zurich (1916) by outraged, disillusioned poets and painters during the First World War. Wholly negative, Dada produced nonsense for its own sake rather than works of art. Surrealism grew out of Dada and continued its antirational character, but formulated a program by André Breton, a Dadaist poet of Paris (1924). Cubists had included bits of newspaper as parts of their designs to demonstrate that art did not depend on brush and pigment; the Surrealists used comparable objects because they were absurd, and also painted "ready-made" objects, such as manufactured articles.

Salvador Dali, the painter of "applied Surrealism," returned to literary sources. Ideas from psychoanalytic literature were illustrated, such as open drawers projecting out of female figures. Well-known neurotic symbols, flabby as "bent time" watches, suggest an association with Einstein's "bent light-curved space" concept. An academic technique and the novelty of fantastic inventions made Dali popular. Surreal-

istic painting appears self-conscious, though Surrealists claimed to explore the unconscious through "dreams and hallucinations." The contribution from the unconscious is comparable to Neo-Classic subjects in David or Romantic subjects in Delacroix. There was no Surrealism before Freud and psychoanalysis became known. Surrealist tendencies were discovered in the art of the past where they probably did not exist, as in Bosch. On the other hand, the unconscious has played a part in artistic creation, and at times has made itself felt in the work of the artist, but not as deliberately as in the professional Surrealists of our own day.

Max Ernst (b. 1891), a self-trained German artist and student of philosophy, was a natural Surrealist. In his early youth he made rubbings from the wood grain of a mahogany plank and studied leaves for their network of veins. He discovered patterns in natural materials, just as Leonardo had. Another approach was to study the illustrations in commercial catalogues of scientific implements and materials from mineralogy and anthropology. By drawing backgrounds on the printed page suggesting sky or horizon, Ernst united irreconcilable objects, such as parts of machinery standing in a desert. From such studies, he created his paintings and influenced the Surrealists.

Sculpture. Neo-Classicism produced the Italian sculptor Antonio Canova, the Dane Bertel Thorvaldsen, the Englishman John Flaxman, and others in Germany and Austria. This was followed in all countries by numerous statues of generals and poets done in a style influenced by realism. Antoine Louis Barye produced some fine animal sculpture, and Jean Baptiste Carpeaux's decorations of the Louvre were related to the Baroque. Impressionism in sculpture found its interpreter in Auguste Rodin (1840–1917). By leaving parts of the unfinished block from which his figures emerged, the contrast of the rough marble with the sensitive modeling of flesh and bone gave his work a living quality (Fig. 242). Aristide Maillol (b. 1861) emphasized repose and massiveness of form. In his plaster relief *Desire* (Fig. 244), solidity is close to archaic Greek sculpture without its stylization. The Belgian sculptor Constantin Meunier (b. 1831) specialized in figures of miners and found inspiration in the hardened muscles of the body used to physical toil. Like Millet, he brought out the dignity of labor. In the Yugoslav Ivan Meštrović (b. 1883), the archaic Greek art became a potent influence. Post-Impressionism in sculpture was represented by the Rumanian Constantin Brancusi and the Russian Aleksandr Porfirievich ... treatment and sculptural bulk ...

ing. Henry Moore (b 1898) has expanded our sympathy fo abstract form derived from nature. He expresses himself i several directions: one of organic growth with a preferenc for the horizontal, another of geometric forms in simpl contours; both may be combined. The human elemen is often more felt than seen. In his *Family Group* (Fig. 243) the relationship of child to parents is sensitively portrayed The Swedish sculptor Carl Milles (b. 1875), often usin; bronze, created an individual style on a monumental scale His fountains (*Orpheus Fountain*, Stockholm) are grandl; conceived, impressive works. Germany produced a grea sculptor in Wilhelm Lehmbruck. His *Standing Youth* and *Kneeling Woman* represent a highly individual style of linea rhythm combined with a spiritual quality. Designed fo side view, this latter figure suggests a delicate resignation perhaps derived from a deeply felt Gothic inspiration; how ever. Lehmbruck is not in the least historical.

Modern Architecture. A break with the revival style o the nineteenth century came with "*Art nouveau*" or "*Jugend still*" around 1900, following the English pioneers unde, William Morris The style, based on curves suggesting plant: and flowers, did not last long enough to leave many monu ments. The early trends toward modern architecture wer: represented by an American, Frank Lloyd Wright; the lead ers of twentieth-century architecture in Europe, Walter Gro pius, Le Corbusier, and Mies van der Rohe, came later. Be tween 1919 and 1933 machine-age design in all the arts wa: integrated in Dessau, Germany, in the so-called Bauhau: School Gropius designed the school buildings and became he founder and first director. Comparable trends were pur sued in France by the architect Le Corbusier (b. 1888 ir Switzerland), who was also a painter, sculptor, and city plan ner. All arts found a unified expression based on structural logic and new materials, out of which developed a new aesthetic. The style became international and produced out standing monuments in many countries.

Conclusion. With the development of the industrial era based on science and technology, the artist lost ground. There were fewer great artists, though more people participated in art. Architecture, sculpture, and painting lost touch with one another; painting became the stronghold of art, architec ture moved closer to engineering, and sculpture receded as a major art.

The professional painter, dedicated to advancing the tradi tion of the past, still commanded prestige, but at the expense of his economic security. Amateur painters adhered to no single approach—their style varied according to ability

or environment. The commercial artist, a new type, virtually took over professional painting, serving advertising devoted to the distribution of goods. The industrial designer replaced the craftsman of an earlier period and often possessed the skill of craftsman, sculptor, painter, and designer.

In the span of a century and a half, the prestige of the painter and sculptor declined; the architect, serving practical ends, maintained his station in life. By mid-twentieth century, a unified style in architecture began to give the metropolis and its environs a semblance of order. Technological changes had produced a severely functional style, but a basic desire for beauty exercised a modifying influence; to restrain ugliness and make the world more beautiful continued to be a powerful motive.

mans. Religious art had almost died out in England and it played only a minor role in the colonies.

John Singleton Copley (1738–1815) was the most important colonial painter, but he eventually settled in London. Growing up in the artistically limited environment of early Boston, Copley developed a solidity of style without Reynolds's elegance, but with an emphasis on design and an expression of the personality of his sitters. A painstaking realism in the head was fused with freer brush work in the costume, a technique which Copley had learned from English portraiture. The portraits of *Nathaniel Hurd* (Cleveland Museum) and *Mrs. Sylvanus Bourne* (Metropolitan Museum of Art) are among Copley's best.

Benjamin West, a Pennsylvania Quaker, succeeded Reynolds as president of the Royal Academy in London, the first American to be so honored. The painting *Penn's Treaty with the Indians* (1772), now in Independence Hall, is well composed in the Neo-Classic manner, but setting and costume disguise the sources of inspiration. Here, as in his *Death of Wolfe,* he introduced contemporary costumes rather than the classical dress then prescribed for historical subjects. In West's studio in London, American artists, among them Charles Willson Peale and Gilbert Stuart, received encouragement and training. Stuart (1755–1828) was the best face painter of the period; his style is illustrated in the *Portrait of Mrs. Yates* (Fig. 245). His most famous American portraits were the Athenaeum portraits of *George and Martha Washington,* which he purposely left unfinished, so that he would not be tempted to sell them. Stuart painted Washington from life only three times, but from these models came from 111 (Park) to 175 (Eisen) replicas. Charles Willson Peale of Philadelphia, ranking below only Copley and Stuart, acquired a reputation for his portraits of Washington; he was also a coachmaker, watchmaker, and silversmith. He excavated the first mastodon skeleton and founded the first scientific museum. John Trumbull (1756–1843), diplomat and son of the governor of Connecticut, was the historical painter of the Revolution, as illustrated in the well-known painting *The Declaration of Independence* (Yale Gallery of Fine Arts, and the Capitol in Washington, D.C.).

The National Period. Samuel F. B. Morse (1791–1872), though a pupil of West's, was influenced by French Classicism in his portrait of the *Marquis de Lafayette.* Not content with painting alone, he helped to organize the National Academy of Design and invented the telegraph.

Between 1812 and the Civil War profound social changes took place. Instead of painting ancestral portraits, artists and laymen became conscious of American life. The artists who

000. Whistler was also a prolific etcher, according to Pennel, better (!) than Rembrandt.

Mary Cassatt (1845–1926) was born in Pittsburgh, studied in Philadelphia, and lived in Paris, where she became a member of the Impressionist group. She specialized in young mothers and children painted in high key, and also produced fine prints.

John Singer Sargent (1856–1925), born in Florence of well-to-do American parents, acquired an excellent training at Carolus-Duran's studio in Paris. He made London his European headquarters, after his *Portrait of Madame Gautreau* had been criticized in Paris as too décolleté. Perhaps under the influence of Velázquez, Sargent painted *The Four Daughters of Edward Darley Boit* (1882) placed informally in a room of their own home. Admired by his own generation for his brilliant technique, the trend today is to dismiss Sargent as having no more than surface attraction.

An objective kind of realism became the characteristically American style during the nineteenth century. James Audubon, of French birth, set out to be a frontier merchant; instead, after training under David, he became a student and painter of American birds. With truly inspired endurance and energy, he sought out the birds in the wilderness, drew them in full-size water colors, had his originals engraved, and wrote the scientific text. His 435 plates with 1065 illustrations, published in four volumes as *The Birds of America*, had an unequaled success (1827–1830).

Thomas Eakins (1844–1916) studied in Paris under Gerôme. He returned to Philadelphia as a teacher at the Academy, where he emphasized anatomy and drawing from the living figure. Whether showing the clinic of *Dr. Gross* (1875), the boxing ring (*Between Rounds*), or the river (*Max Schmidt in a Single Scull*), Eakins placed each object accurately in space to suggest depth. His artistry compensates for the drabness of his world.

Romanticism, when applied to American painting, implies a sense of unity with nature close to that of such German Romantic painters as Friedrich and includes such painters as Washington Allston (*Moonlit Landscape*), Thomas Cole (*The Voyage of Life*), and Asher B. Durand (*Kindred Spirits*). John Quidor (1801-1881), an artisan painter of banners and fire-engine panels, painted *The Return of Rip van Winkle* (1829), an interpretation of the famous story from Washington Irving's *Sketch Book* (1818). Rip, after a twenty-year sleep, wakes up, unkempt and ragged, to find himself in a strange world, surrounded by a staring crowd caricatured through grotesque expressions (Fig. 247). Whether or not Quidor had Albert Pinkham Ryder (1847–1917) as a pupil

The "Group of Eight." Though Whistler, Sargent, Homer, and Eakins were still living in 1900, a younger generation of painters carried their tradition of realism further. A slashing brush stroke and a lust for life characterized the first decade of the century. Robert Henri, working in the Hals-Velázquez-Manet tradition of realism, was the leader of "The Eight": William Glackens, George B. Luks, John Sloan, Everett Shinn, Arthur B. Davies, Maurice B. Prendergast and Ernest Lawson. This twentieth-century revolution of the so-called "Ash Can School" brought to art subjects from slums and saloons, poolrooms and theaters, factories and workshops. In literature, Jack London and Frank Norris paralleled this movement. Sloan painted New York and the waterfront in a broad, vigorous style. His strength lay in his spontaneous interpretations of what he had seen and experienced, as in *The Wake of the Ferry*. Glackens's style was closer to Renoir and Manet. Jerome Myers dealt sympathetically with motifs from the slums of New York. George Bellows introduced a note of excitement in his paintings and lithographs of prize fights and of Hudson River scenes. In his painting *The White Horse*, the sun breaking through light clouds over the distant hills gives nature a touch of magic splendor upon which even horse and dog gaze in wonder (Worcester Museum).

Stieglitz, Marin, Demuth, O'Keeffe, Sheeler, Hopper and Burchfield. American painters who studied in Paris from 1900 on felt the impact of the Fauves and of Cubism. Among them were Bernard Karfiol, Charles Demuth, Charles Sheeler, and Marsden Hartley. Alfred Stieglitz in his Photosecession Gallery "291" introduced Matisse to America and sponsored the advanced French and American painters of his day. In his own right, Stieglitz became the dean of photography as an art. The Armory Show of 1913 stirred up the public and stimulated American collectors to purchase French paintings, but did not bring on any lasting American School of Fauves or Cubists. The decade of the twenties was one of ferment. New collections dedicated to twentieth-century art were founded, and dealers who arranged one-man exhibitions also contributed toward a broadening of taste in contemporary painting. New York skyscrapers and the Maine coast inspired John Marin's water colors. Marin was an individualist, at times strong and sensitive in his work. He speaks of "buildings large and small, seen as great forces at work, pushing, pulling, sideways, downward, upward. . . ." Perhaps his water color *Lower Manhattan* (1920) illustrates these forces. This often-produced work, to paraphrase Grant Wood, "seems to be carried by a knowledge of the feelings that inspired the artist." Demuth's water-color

resulted in the 17,500 water-color renderings of *The Index of American Design*, now in the National Gallery of Art. Through exhibitions and publications, this unique collection has served to make American crafts and folk arts known in this country and abroad.

Social Realism. Toward the late twenties and in the thirties, the Soyer brothers represented with sympathy the life of the poor, Reginald Marsh, the miserable lodging houses of New York's Bowery or bathers piled up on the beaches of Coney Island. William Gropper struck a sharp note of protest (Ill. 126) which made the Henri realists seem mild. Aaron Bohrod described the desecration of the landscape made ugly by the clutter of junked cars. Ben Shahn (b. 1898) developed an individual style in which realism has human significance. *Sacco and Vanzetti* (Fig. 251), seated and chained together, look out at the world perplexed, unbelieving, a muted protest insistent in its emotional impact. In a drawing *Girl Jumping Rope* (1943), the gaunt contours, a silent reminder of hunger, also count as linear rhythms; the ungainly child playing is expressive; a sweet, intense sadness arouses our compassion. Shahn's artistry is reticent but compelling. Jack Levine's (b. 1915) social realism depends on grotesque distortions of people, rich men at banquets, miserable characters from the underworld playing cards.

Ill. 126 Gropper: Under the "El." drawing.

Abstraction. The severely intellectual Cubism of Europe became something else in the American environment, as in Max Weber's interpretations (*Chinese Restaurant*, 1915). The specific and concrete were also present in Joseph Stella, as in his *Brooklyn Bridge* (1917), and Man Ray created abstractions using water color and air brush (*Aerograph* 1919). Abstract painters like Macdonald-Wright and Morgan Russell temporarily aimed to purify their art of anecdote and illustra-

A pupil of Albers's, Sue Fuller, uses plastic string for a linear maze strung within an open frame. Curves result from tangents and, through the use of colored threads, optical color mixtures occur; background as well as reflected light make for additional variations.

Contemporary Painting. The most potent influences today are "the order of Mondrian, the monster of Picasso, and the maze of Jackson Pollock"[19] (1912–1956), chief rep-

Ill. 128 Pollock· Echo ⸱⸱ ⸱ ⸱ ⸱ ⸱ ⸱ ⸱ ⸱ *Mrs Ben Heller, New York* ⸱⸱⸱⸱⸱⸱ ⸱⸱⸱ *Gallery.*

resentative of the ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱g on a large canvas, Pollock ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱ ⸱⸱⸱nt freely in a version of the ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ technique elaborated to ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱ting freshness produced ⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ the hand transferred to ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ and splashes. The sweeps ⸱⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱⸱⸱ ⸱⸱⸱er, rise, rebound,

velopment of sculpture came with the twentieth century, as has been previously discussed (p. 306).

The colonial period has left us a rich heritage of distinguished work in domestic architecture as well as in such public buildings as *Independence Hall* in Philadelphia. The Neo-Classic period produced the *Capitol* in Washington, D.C., a monumental design that does justice to the aspirations of the several architects who evolved the building as it stands today (1959). American architecture during the nineteenth century paralleled Europe in adopting one historical style after another. Many of the vigorous and even original buildings in downtown Philadelphia and New York were demolished before they had received sympathetic consideration. This included even such modern buildings as Frank Lloyd

Ill. 130 Al Hirschfeld: First in War. First in Peace! drawing. *Courtesy* The Nation (*New York*) *and the artist*

Wright's *Midway Garden* (Chicago), built in 1914 and demolished in 1923. However absurd the application of the classic orders to a steel frame, eclecticism of the first quarter of the twentieth century produced buildings designed in exquisite taste. Post-World War I architecture revolted against the unattractive nineteenth-century industrial architecture and large-scale housing projects as well as against the classic orders. In the early 1890's Louis Sullivan created the modern skyscraper of steel construction. In the *Guaranty Building* in Buffalo, height was emphasized and the terra-cotta exterior was decorated with a delicate ornamentation of Sullivan's own creation. Nevertheless, the historic trend persisted and affected skyscraper design as late as 1911 in Cass Gilbert's Gothic *Woolworth Building* (New York). This trend culminated in the distinguished work of the firm of McKim, Meade and White in such New York buildings as the *Morgan Library*, the *Gorham Building*, and the *Pennsylvania Railroad Station* (1906–10) and in Washington, Henry Bacon's *Lincoln Memorial* (1914–21). The success of this "American Renaissance" delayed the introduction of Modernism. With the work of Henry H. Richardson, Louis Sullivan, and Frank Lloyd Wright, American architecture achieved independence. After World War I, a more simplified expression appeared in such buildings as the New York *Barclay-Vesey Telephone Building* (McKensie, Voorhees and Gmelin, 1923–26). *Rocke-*

solution of each building in an original way: precast ornamental concrete block, used externally *(Millard House)*, hollow and flowerlike reinforced concrete columns *(Johnson Wax Company Building)*, or a house projected on cantilevers across a waterfall with holes left in porch roofs for existing trees to grow through *(Kaufmann House)*. This latter is a supreme example of Wright's genius for relating the building to the environment. The design for the *Guggenheim Museum* in New York, based on a spiral, shows that Wright, after more than sixty years of architectural design, was still a revolutionary (Fig. 257).

In the industrial arts, the automobile, like household appliances, reflects modern trends; in the best examples, line, form and color are well integrated (Ill. 132). Modern crafts
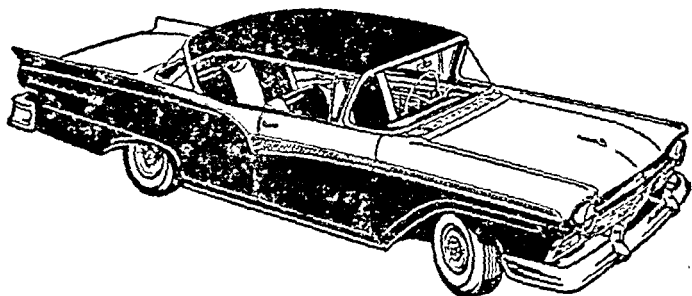
Ill. 132 *Fairlane 500* Town Victoria, 1957 Model. *Courtesy Ford Motor Company*

continue in connection with industry, well-known designers furnishing the decoration, as in Marie Laurencin's Steuben *Glass Urn* (Fig. 254).

Conclusion The conquest of a continent and the industrial revolution delayed art in America, but did not prevent its appearance. There were artists in all periods through the short history of the country. Often the folk arts developed before the historical arts based on the academic traditions of Europe could take hold. After the last frontier had disappeared, art developed in the United States on a par with Europe, and, by the middle of the twentieth century, Europe was becoming increasingly aware of American art. In the cultural exchange between nations, there are indications today that in art the United States may be turning from a position of receiving to one of giving.

SELECTED BIBLIOGRAPHY

Books with color plates are marked with an asterisk (*)

General

*Cairns, Huntington, and Walker, John. *Masterpieces of Painting from the National Gallery of Art*. New York: Random House, 1944.

*———. *Great Paintings from the National Gallery of Art*. New York: Macmillan, 1952.

Fletcher, Sir Banister. *A History of Architecture on the Comparative Method*. New York: Scribner, 1954; London: Batsford, 1956.

Friedländer, Max J. *On Art and Connoisseurship*. London: Cassirer, 1942.

Gombrich, E. H. *The Story of Art*. New York: Phaidon, 1950.

Hauser, Arnold. *The Social History of Art*. 2 vols. New York: Knopf, 1951.

Hildebrand, Adolf. *The Problem of Form in Painting and Sculpture*. New York: Stechert, 1907.

Hind, A. M. *History of Engraving and Etching*. Boston: Houghton Mifflin, 1923

Kris, Ernst. *Psychoanalytic Explorations in Art*. New York: International Universities Press, 1952.

La Farge, Harry (ed.). *Lost Treasures of Europe*. New York: Pantheon, 1946.

Michel, André. *Histoire de l'art depuis les premiers temps chrétiens jusqu'à nos jours*. 8 vols. Paris: Colin, 1905.

Ogden, C. K., Richards, I. A., and Wood, J. E. H. *The Foundations of Aesthetics*. London: Allen and Unwin, 1922.

Pope, Arthur. *The Language of Drawing and Painting*. Cambridge: Harvard, 1949.

Sewall, J. I. *A History of Western Art*. New York: Holt, 1953.

Seymour, Charles. *Masterpieces of Sculpture from the National Gallery of Art*. New York: Coward-McCann, 1949.

Shapley, Fern Rusk and Shapley, John. *Comparisons in Art, A Companion to the National Gallery of Art*. New York, Phaidon, 1957.

Stites, Raymond S. *The Arts and Man*. New York: Whittlesey House, 1940.

*Venturi, Lionello. *Italian Painting from Caravaggio to Modigliani*. Geneva: Skira, 1952.

Waterhouse, Ellis K. *Painting in Britain, 1530-1790*. Baltimore: Penguin, 1953.

Woermann, Karl. *Geschichte der Kunst aller Zeiten und Völker*. Leipzig: Bibliographisches Institut, 1922.

Wölfflin, Heinrich. *Principles of Art History*. New York: Holt, 1932.

————: *Byzantium: Greatness and Decline.* Rutgers University Press, 1957.

*Grabar, André. *Byzantine Painting.* Geneva: Skira, 1952.

Lowrie, Walter. *Art in the Early Church.* New York: Pantheon, 1947.

7. Early Medieval and Romanesque Art

Hinks, Roger. *Carolingian Art.* London: Sedgwick and Jackson, 1935

Kendrick, T. D. *Anglo-Saxon Art to A.D. 900.* London: Methuen, 1938.

Kitzinger, Ernst. *Early Medieval Art.* London: British Museum, 1940

*Metz, Peter. *The Golden Gospels of Echternach.* New York: Praeger, 1957.

Stenton, Sir Frank *The Bayeux Tapestry.* New York: Phaidon, 1956.

Swarzenski, Hanns *Monuments of Romanesque Art: The Art of Church Treasures in Northwestern Europe.* Chicago University Press, 1953.

8. Gothic Art

Colombier, Pierre de *Les Chantiers des Cathédrales.* Paris: Picard, 1953

*Dupont, Jacques, and Gnudi, Cesare. *Gothic Painting.* Geneva: Skira, 1954

Simson, Otto von. *The Gothic Cathedral.* New York: Pantheon, 1956

Worringer, Wilhelm *Form in Gothic.* London: Alec Tiranti, 1927.

9. Renaissance Art

Berenson, Bernard *The Italian Painters of the Renaissance.* New York Phaidon, 1952.

Bode, Wilhelm von *Florentine Sculptors of the Renaissance.* New York. Scribner, 1909.

Burckhardt, Jacob *The Civilization of the Renaissance in Italy.* New York Harper, 1929.

Fischel, Oskar *Raphael* 2 vols. London: Paul, 1949.

Fränger, Wilhelm *The Millennium of Hieronymus Bosch.* London: Faber, 1952.

Friedländer, Max J. *Die Altniederländische Malerei.* 14 vols. Berlin: Cassirer, 1924.

Goldscheider, Ludwig. *The Sculptures of Michelangelo.* New York: Oxford, 1940.

Grossmann, F. *Brueghel, the Paintings.* London: Phaidon, 1955.

Panofsky, Erwin. *Albrecht Dürer.* 2 vols. Princeton University Press, 1948.

Pevsner, Nikolaus, and Meier, Michael. *Grünewald.* New York: Abrams, 1958.

Sirèn, Osvald. *Leonardo da Vinci.* New Haven: Yale, 1916.

Tietze, Hans. *Titian Paintings and Drawings.* Vienna: Phaidon, 1937.

Walker, John. *Bellini and Titian at Ferrara.* London: Phaidon, 1956.